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SUBJECT-MATTER INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED.

FOR THE YEAR 1853.

[Second Edition.]

15 & 16 VICTORIÆ, Cap. 83. Sec. XXXII.

SUBJECT-MATTER INDEX

OF

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FOR THE YEAR 1853.

Printed and Published by Order of the Commissioners of Patents,

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SUBJECT-MATTER INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED.

For the Year 1853.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ACCIDENTS, PREVENTION OF.			
Apparatus to be used in connection with railway-signals, for the purpose of indicating the approach of trains, and of preventing collisions.	25	5th Jan. 1853	Charles Frederick Whitworth.
Stove-grates	127	18th Jan. 1853	John Sheringham.
Steam-generators	135	19th Jan. 1853	Celestin Malo.
Mode of preventing accidents by improved signals on railways;—partly applicable to blast-furnaces.	225	29th Jan. 1853	William Archer.
Carriages used on railways	327	5th Feb. 1853	Edward Palmer.
Improvements in locomotives, part of which improvements are applicable to other steam-engines. (*Preventing the bursting of the boiler.*)	533	3rd March 1853	Auguste Edouard Loradoux Bellford.
Unhooking horses and impeding or stopping vehicles on common roads	644	15th March 1853	Pierre Sigisbert L'Hernault. Jean Richard.
Prevention of accidents on railways	873	12th April 1853	Alexander Turiff.
Means for preventing accidents on railways	898	13th April 1853	Moses Robinson.
Improvements in and applicable to boilers or apparatus for generating steam, and in apparatus connected therewith. (*Safety plug.*)	959	21st April 1853	Thomas Dunn.
Improvements in fire-arms	964	21st April 1853	Philip Harris.
Modes of preventing accidents arising from an insufficient supply of water in steam-boilers.	1085	4th May 1853	Edward Walmsley.
Method of preventing collisions on railways	1405	9th June 1853	George Bott. William Rushton.
Method of stopping railway-trains and preventing railway accidents.	1521	22nd June 1853	John Henry Noone.
Apparatus for preventing explosions in steam-boilers	1588	1st July 1853	John Rollinson. William Rollinson.
Preventing accidents on railways	1737	23rd July 1853	Auguste Buisson Lalande.
Railway-signals; means of preventing accidents upon railways; apparatus connected therewith.	1918	16th Aug. 1853	George Richardson.
Ventilating and preventing spontaneous combustion in ships and other vessels laden with coal, culm, or cinders.	2097	10th Sept. 1853	Robert Tronson.
Apparatus for throwing out ropes or lines for the better preservation of life and property. (*Firing from a cannon.*) (*Communicated by Monsieur d'Houdetot.*)	2237	30th Sept. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ACCIDENTS—*continued.*			
Means of preventing accidents on railways - -	2285	6th Oct. 1853	Manuel Fernandez De Castro.
Apparatus applicable to carriages on common roads for prevention of accidents and increasing the power of locomotion.	2325	11th Oct. 1853	Louis Alexandre Farjon-Demoulin.
Retarding-apparatus for the prevention of accidents on railways.	2328	11th Oct. 1853	John Colin Sharp.
Means of preventing accidents on railways - -	2383	15th Oct. 1853	John Peary.
Apparatus for avoiding collisions of trains on railways.	2403	18th Oct. 1853	Cornelius Nicholson.
Mode and apparatus for preventing accidents on railways, including improvements in signalizing apparatus.	2456	25th Oct. 1853	Christopher Richard Norris Palmer.
Construction of railway-carriages whereby, in the event of collision, the crushing of the carriages will be prevented.	2501	29th Oct. 1853	Edwin Dalton Smith.
Construction of carriages; means of preventing the overturning of the same when horses take fright. (*Disengaging horses.*)	2524	1st Nov. 1853	Mark Newton.
System or arrangement for preventing collisions or accidents on railways.	2539	2nd Nov. 1853	William Maltby.
An improvement in steam-boilers, which is applicable to other vessels for containing compressed air, vapour, or gas.	2585	7th Nov. 1853	Robert Roughton.
Signal apparatus for the prevention of accidents on railways.	2586	7th Nov. 1853	Thomas Walker.
Preventing accidents on railways, also in shifting and lifting railway-carriages.	2606	10th Nov. 1853	Peter Armand le Comte de Fontainemoreau.
Double-acting railway signal for preventing collisions or accidents on railways.	2666	17th Nov. 1853	John Banfield.
Means or apparatus for the prevention of accidents on railways in certain cases.	2847	8th Dec. 1853	Thomas Morau.
Means of preventing accidents upon railways -	2944	17th Dec. 1853	Matthew Parsons Houghton. Andrew Stewart.

See also "FIRE-ESCAPES."
"COACH-BREAKS."
"RAILWAYS (Buffers and Breaks)."
"SWIMMING, &c."
For Life-boats,—*see* "SHIP, &c., BUILDING."

ACIDS (*making, purifying, concentrating*).			
Manufacturing sulphuric acid and copper from copper ores, reguluses, and matts.	57	8th Jan. 1853	William Henderson.
Apparatus for refrigerating - - - (*Precipitating and concentrating oxalic acid.*)	106	15th Jan. 1853	Hippolyte Charles Vion.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ACIDS—*continued.*			
Process of and apparatus for distilling certain vegetable and mineral matters, also animal bones and flesh. (*For obtaining acetic acid, spirits of wood, &c.*)	174	24th Jan. 1853	David Clovis Knab.
Manufacture of sulphuric acid, alkalies, and their salts.	731	26th March 1853	George Robb.
Manufacture of sulphuric acid, alkalies, and their salts.	788	2nd April 1853	George Robb.
Manufacture of certain compounds containing phosphoric acid. (*Collecting sulphuric, muriatic, and nitric acids.*)	1203	16th May 1853	Thomas Richardson.
Mode of making with iodine and its compounds, in combination with substances containing extractive principles, various elementary combinations. (*Iodhydric acids, &c.*)	1487	18th June 1853	Jacques François Dupont de Bussac.
Construction of furnaces for the purpose of obtaining products from ores.	1672	14th July 1853	William Henderson.
Manufacturing sulphuric acids - - -	1919	16th Aug. 1853	William Hunt.
Manufacture of sulphuric acid - - - -	2079	9th Sept. 1853	Isaac Lothian Bell.
Apparatus for the manufacture of sulphuric acid -	2094	10th Sept. 1853	Edmund Leyland.
Treatment of fatty and oily matters to render them suitable for the manufacture of candles.	2099	10th Sept. 1853	John Webster.
Manufacture of sulphuric acid - - -	2321	10th Oct. 1853	Hugh Lee Pattinson.
Carbonizing and distilling peat, coal, wood, and other animal, vegetable, and mineral substances. (*And obtaining acetic acid.*)	2435	21st Oct. 1853	Jean François Felix Challeton.
Manufacture or production of sulphuric acid -	2635	14th Nov. 1853	Alexander Cuninghame.
Apparatus for the manufacture or production of sulphuric acid - - - - - -	2803	2nd Dec. 1853	Henry Deacon. Edmund Leyland.
Manufacture of an artificial tartaric acid; application of the same to useful purposes.	2831	6th Dec. 1853	Auguste Edouard Loradoux Bellford.
ADVERTISING.			
Mode of advertising - - - - -	618	11th March 1853	Edouard Alexandre.
Mode of giving publicity - - - -	736	28th March 1853	Augustin Chrysostome Bernard. Jacques Marie Pierre Alberic de St. Roman.
System of publicity - - - - - -	1853	9th Aug. 1853	Henry Des Moutis.
Mode of giving publicity - - - -	2681	18th Nov. 1853	Jean Baptiste Clavières.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AËRATED LIQUIDS; EFFERVESCING DRINKS; MINERAL WATERS.			
Apparatus for refrigerating - - - (*Applicable for producing mineral waters.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Apparatus for aërating liquids - - -	539	3rd March 1853	Bernard Chaussenot.
Certain improvements in the production of aërated liquids	766	30th March 1853	Joseph Xavier Villiet, senior.
Preparing effervescing powders - - -	1323	28th May 1853	Alfred Whaley Sanderson.
Mode of making, with iodine and its compounds, in combination with substances containing extractive principles, various elementary combinations.	1497	18th June 1853	Jacques François Dupont de Bussac.
A new aëro-gaseous drink;—"Grimaudine" -	1513	20th June 1853	Pacifique Grimaud.
Preparation and manufacture of certain effervescing beverages.	1699	16th July 1853	Henry Lamplough.
Apparatus for generating and applying carbonic acid gas.	1993	27th Aug. 1853	Samuel Taylor.
Apparatus for the manufacture of aërated liquids -	2366	14th Oct. 1853	Andrew M'Lean. William Fraser Rae.
AËRIAL MACHINES.			
Aërial navigation; machinery or apparatus connected therewith.	179	24th Jan. 1853	John Henry Johnson.
Manufacture of articles made of gutta-percha - (*Balloons.*)	395	15th Feb. 1853	Alphonse Rene le Mire de Normandy.
Applying the ascensional force of balloons to various useful purposes.	1068	4th May 1853	Jean Brando Giannetti.
AIR AND GAS ENGINES.			
Motive-power engives; application of motive-power to the same.	12	3rd Jan. 1853	Edme Augustin Chameroy.
Atmospheric engines - - - - -	20	5th Jan. 1853	William Edward Newton.
Obtaining motive-power - . - -	21	5th Jan. 1853	Jean Baptiste Pascal.
Obtaining motive-power - - - -	100	14th Jan. 1853	John Henry Vries.
Engines to be worked by steam or other fluid -	258	31st Jan. 1853	Frederick Lawrence. William Davison. Alfred Lawrence.
Obtaining motive-power - - - -	362	10th Feb. 1853	Robert Roger.
Application of atmospheric currents to the obtainment of motive power.	419	17th Feb. 1853	George Leopold Ludwig Kufahl.
Obtaining motive-power - - - -	435	19th Feb. 1853	James Anderson.
Obtaining power by steam and air - - -	493	26th Feb. 1853	Charles Tetley.
A new mode of obtaining and using power by explosion of gases.	515	1st March 1853	Robert Lewin Bolton.
Production of motive-power - - -	516	2nd March 1853	Lawrence Hill, junior.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR AND GAS ENGINES—*continued.*			
Rotatory engines for obtaining motive-power, and for transmitting aëriform bodies and fluids.	532	3rd March 1853	Robert Barclay.
Obtaining power when air is employed - -	692	21st March 1853	Moses Poole.
Apparatus for measuring gas, water, and other fluids;—also applicable for obtaining motive-power.	773	31st March 1853	George Hanson.
Engines to be worked by air or gases - -	793	4th April 1853	William Edward Newton.
Machinery to be actuated by water or air - -	855	9th April 1853	George Frederick Goble.
Obtaining motive-power - - - - -	1248	20th May 1853	Edward Jones Schollick.
Rotary engines to be driven by steam or any vapour fluid or gas; boilers or generators to be used in generating steam or gas for driving the aforesaid or other engines, or for other purposes.	1251	20th May 1853	Auguste Edouard Loradoux Bellford.
Engines to be worked by steam, air, or air and water combined.	1336	31st May 1853	George Goodlet.
Obtaining motive-power - - - - -	1408	9th June 1853	Antoine Ponçon.
Engines for developing mechanical power by the action of heat on air and other elastic fluids - - - - - -	1416	9th June 1853	James Robert Napier. William John Macquorn Rankine.
Obtaining motive-power - - - -	1436	13th June 1853	Joseph Webb.
Revolving-engine, to be worked by air or gases, &c.	1445	15th June 1853	Arthur Parsey.
Obtaining motive-power - - - -	1569	29th June 1853	John Imray.
Obtaining and applying motive-power - -	1577	30th June 1853	Joseph Webb.
Obtaining power by compressed air - -	1630	8th July 1853	Louis Brunier.
Gas and air engines - - - - -	1648	11th July 1853	Fabian Wrede.
Engines worked by steam, air, or fluids - -	1736	23rd July 1853	William Huntley.
Obtaining power by the aid of an electric current, for motive and telegraphic purposes.	2032	2nd Sept. 1853	Augustino Carosio.
Engine to be worked by steam, air, or water -	2052	6th Sept. 1853	James Davis. Robert Ramsay.
Obtaining motive-power by the aid of air and other expansive gases.	2173	19th Sept. 1853	John Stephens.
Obtaining power by carbonic acid gas - -	2446	22nd Oct. 1853	Hume Greenfield.
Improved application of magneto-electricity for driving machinery, and for neutralizing the impulsive force of machinery in motion. (*A machine driven by hot air.*)	2764	26th Nov. 1853	Joseph Scipion Rousselot.
Obtaining motive-power by means of heated gases -	2768	28th Nov. 1853	Prix Charles Jean Baptiste Sochet.
Machinery or apparatus for obtaining and applying motive-power - - - - - -	2850	8th Dec. 1853	Joseph Goddard. Charles Yates.
Obtaining and applying motive-power - -	2887	12th Dec. 1853	William Evans.
See also "VALVES, &c." For Governors—*see* "STEAM GOVERNORS, &c."			

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR SUPPLYING, BLOWING, AND EXHAUSTING; DRAFT AND VENTILATION.			
I.—Supplying Air to Furnaces, Stoves, &c.; increasing and regulating Draft; Dampers.			
A thermostat or apparatus for the regulation of temperature and of ventilation.	42	6th Jan. 1853	William Sykes Ward.
Economizing fuel in the generation and heating of steam.	69	11th Jan. 1853	Joseph Beattie.
Stove-grates	127	18th Jan. 1853	John Sheringham.
Grates of furnaces used in the manufacture of glass	142	20th Jan. 1853	Richard Mountford Deeley.
Construction of furnaces	148	21st Jan. 1853	George Carter.
Production and application of heated air (*Increasing draft in chimneys.*)	155	21st Jan. 1853	William Taylor.
Construction of glass-house furnaces	159	21st Jan. 1853	Reuben Plant.
Mode of preventing accidents by improved signals on railways;—partly applicable to blast-furnaces. (*Supplying air to such furnaces.*)	225	29th Jan. 1853	William Archer.
Construction of boilers and apparatus connected therewith.	272	1st Feb. 1853	Joshua Murgatroyd.
Construction of furnaces or flues whereby economy in the use of fuel, the consumption of smoke or gases, and the utilizing thereof, are ensured.	350	10th Feb. 1853	James Spotswood Wilson.
Apparatus for improving the draft of chimneys	391	15th Feb. 1853	Thomas William Kennard.
Apparatus for consuming smoke	530	3rd March 1853	Simon O'Regan.
Steam-engines (*Admitting air to the condenser.*)	558	5th March 1853	William Todd.
Manufacture of iron (*Forcing air on to the ore from the roof of the furnace.*)	678	18th March 1853	George Mackay.
Construction of gas-stoves	717	24th March 1853	Henry Webster. Edward Dawson Stones.
Certain improvements in regulating the draft in chimneys and other outlets for smoke, air, and vapours.	760	30th March 1853	William Henham.
Improvements in locomotive engines (*Securing draft.*)	786	2nd April 1853	Sir James Caleb Anderson, Bart.
Steam-boilers, appendages thereto (*Working the damper.*)	1021	27th April 1853	Thomas Culpin.
Improvements in hot-air furnaces for heating buildings; some of which improvements are applicable to other furnaces.	1061	3rd May 1853	William Edward Newton.
Improvements in furnaces	1100	5th May 1853	William Moore.
Construction of chimneys or flues; apparatus for increasing draft, consuming smoke, or utilizing the same.	1192	14th May 1853	John Brown.
Grates and stoves	1215	17th May 1853	John Lee Stevens.
Steam-boilers (*And furnaces.*)	1534	24th June 1853	Joshua Hornton.
Reverberatory and other furnaces	1650	11th July 1853	George Dalton.
Construction of furnaces for the purpose of obtaining products from ores.	1672	14th July 1853	William Henderson.
Method of melting or fusing iron or metals; apparatus employed therein.	1745	25th July 1853	William Ireland.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Air, &c.—*continued.*			
Apparatus for consuming smoke	1790	1st Aug. 1853	John Gray.
Improvements in furnaces	1863	10th Aug. 1853	Samuel Hall.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Mons. Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Steam-boilers; apparatus applicable thereto and to be used therewith	2029	2nd Sept. 1853	John Tayler. James Griffiths. Thomas Lees.
An improvement in furnaces	2035	3rd Sept. 1853	John Thomas Jewiss. Daniel Jewiss.
Wind-guard or chimney-top	2066	8th Sept. 1853	John Dickinson Brunton.
Improvements in furnaces	2082	9th Sept. 1853	Jonathan Amory.
Furnaces for effecting the consumption of smoke	2109	12th Sept. 1853	John Robison. William Jackson.
Locomotive and other boilers for generating steam	2118	13th Sept. 1853	Alexander Allan.
Heating reverberatory and other furnaces	2255	3rd Oct. 1853	William Joseph Thompson.
Stoves and kitchen-ranges	2287	6th Oct. 1853	Henry Goddard.
Regulating the flow of air to steam-boiler furnaces	2315	10th Oct. 1853	Henry Rawson. Thomas Whitehead.
Improvements in furnaces	2359	13th Oct. 1853	Abraham Pope.
Means of or apparatus for reducing the quantity of smoke from the furnaces of boilers, coppers, pans, and other like vessels.	2377	15th Oct. 1853	Benjamin Price.
Apparatus applicable to the manufacturing and the revivification of animal and vegetable charcoal, and other useful purposes.	2388	17th Oct. 1853	George Frederick Chantrell.
Prevention of smoke in steam-boilers	2424	20th Oct. 1853	John Beasley Burney.
Carbonizing and distilling peat, coal, wood, and other animal, vegetable, and mineral substances. (*Equalizing draft.*)	2435	21st Oct. 1853	Jean Francois Felix Challeton.
Certain improved means or arrangements for the prevention of smoke and the economizing of fuel in furnaces.	2453	24th Oct. 1853	Alexander Hett.
Fire-places, grates, or furnaces (*Regulating draft.*)	2495	28th Oct. 1853	Malcolm Maclaren.
Construction of ovens and furnaces (*Regulating dampers.*)	2521	1st Nov. 1853	John Crowley.
Abstracting and condensing smoke arising from steam-engine and other furnaces; obtaining a supply of air for supporting the combustion of the fuel in such furnaces, thereby superseding the necessity of chimney shafts and funnels.	2548	3rd Nov. 1853	William Wood.
Construction of steam-boiler and other furnaces	2559	4th Nov. 1853	George Nasmyth.
Construction of steam-boilers; mode or method of fixing the same.	2560	4th Nov. 1853	William Hindman.
Steam-boiler and other furnaces (*Supplying air; regulating draft.*)	2574	5th Nov. 1853	Robert William Jearrad.
Improvements in heating and lighting	2620	11th Nov. 1853	Richard Archibald Brooman.
Furnaces and fire-places; prevention of smoke	2657	16th Nov. 1853	John Ferguson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR, &c.—*continued.*			
Construction of steam-engine boiler and other furnaces. (*Regulating draft.*)	2661	17th Nov. 1853	George Carter.
Apparatus for drying clay - - - -	2696	19th Nov. 1853	Henry Daniell.
Improvements in rotary engines - - -	2751	25th Nov. 1853	Auguste Edouard Loradoux Bellford.
Generating steam and consuming smoke - -	2793	1st Dec. 1853	Thomas Garnett. Daniel Adamson.
Consumption or prevention of smoke - -	2826	5th Dec. 1853	James Robertson.
An improved cooking apparatus - - - (*Dampers.*)	2954	20th Dec. 1853	Adam Paterson.
Manufacture of liquid hydro-carbons and paraffine - (*Regulator.*)	2958	20th Dec. 1853	Paul Wagenmann.
Apparatus for regulating the supply of air to furnaces, and for preventing radiation of heat from fire-doors and other parts of the fronts of furnaces.	3000	27th Dec. 1853	Thomas Symes Prideaux.
XI.—Supplying Air to Corn-grinding and to Reaping Machines.			
A smut machine - - - - - (*Communicated by Leonard Smith.*)	182	25th Jan. 1853	Warren Fisk Shattuck.
Grinding wheat and other grain - - -	836	7th April 1853	William Henry Wells. Edward Mann. John Harman.
Machines for thrashing seeds and grains, and for cleaning them from the straw and chaff after they are thrashed. "Palmer's American seed and grain thrasher and winnower."	866	11th April 1853	William Russell Palmer.
Storing and preserving grain - - - -	1268	23rd May 1853	Amédé Devy.
Grinding wheat and other grain - - -	1498	18th June 1853	George Young.
Apparatus for cleaning and separating corn, grain, and other seeds.	1732	22nd July 1853	John Gillam.
Machinery for cleaning bran or other offal obtained during the manufacture of flour.	2013	30th Aug. 1853	William Edward Newton.
Machinery for separating flour, shorts, and dustings, from bran as it comes from the bolting apparatus.	2135	14th Sept. 1853	Moses Poole.
Thrashing-machines; apparatus connected therewith. (*Using a fan for removing dust, &c.*) (*Communicated by Germain Sommeiller.*)	2284	6th Oct. 1853	John Henry Johnson.
Winnowing or dressing corn - - - -	2331	11th Oct. 1853	James Hall Nalder. John Thomas Knapp.
Millstones for grinding corn, seeds, or minerals -	2569	5th Nov. 1853	John Smith.
An invention for the ventilation of granaries, storehouses, or other places of deposit for grain; grinding of grain and dressing of grist; grinding generally.	2950	19th Dec. 1853	William Crossby.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR, &c.—*continued.*			
III.—Supplying Air to Lamps or Burners.			
Safety-lamps;—partly applicable to other lamps -	166	22nd Jan. 1853	George Fife.
Gas-burners; regulating the combustion of gas -	297	3rd Feb. 1853	John Henry Johnson.
Construction of oil lamp - - - -	686	19th March 1853	Alfred Vincent Newton.
Apparatus for heating, applicable for generating steam or evaporating solutions, and may be applied for heating purposes generally. (*Supplying air to jets of gas.*)	826	6th April 1853	Henry Alfred Jowett.
Improvements in safety-lamps, part or parts of such improvements being applicable to the consumption or prevention of smoke, and purposes of ventilation generally.	1851	9th Aug. 1853	Thomas Young Hall.
Lamps; lanterns used therewith - - -	1883	12th Aug. 1853	Read Holliday.
Improvements in lamps - - -	1928	17th Aug. 1853	Joseph Hart Mortimer.
Construction of submarine lamp - -	1961	23rd Aug. 1853	William Rettie.
Improvements in lighting, for consuming the carbon escaping combustion in ordinary flames.	2071	9th Sept. 1853	Peter Armand le Comte de Fontainemoreau.
Improvements in heating and lighting - - -	2620	11th Nov. 1853	Richard Archibald Brooman.
Carriage and other lamps - - -	2919	16th Dec. 1853	William Binnion.
Moderator lamp, or lamps of a similar principle -	2999	27th Dec. 1853	Samuel Sedgwick. Thomas Dawson.
IV.—Supplying, Blowing, Exhausting, and Compressing Air, and producing Vacuum for various Purposes.			
Taps and other apparatus for filtering and drawing off liquids.	1	1st Jan. 1853	William Wilkinson.
Certain improvements in the transmission and the emission of air and sound.	51	7th Jan. 1853	Hezekiah Marshall.
Method of producing a certain colour or colours on woven or textile fabrics and yarns; machinery or apparatus connected therewith. (*In an exhausted receiver.*)	223	29th Jan. 1853	Harold Potter.
Engines to be worked by steam or other fluid - (*Air or gas pump.*)	258	31st Jan. 1853	Frederick Lawrence. William Davison. Alfred Lawrence.
Rotatory engines for obtaining motive-power, and for transmitting aëriform bodies and fluids. (*Applicable as a blowing and exhausting apparatus.*)	532	3rd March 1853	Robert Barclay.
Improved construction of blower - -	536	3rd March 1853	Samuel Colt.
Improvements applicable to carding-engines used for carding cotton wool and other fibrous material.	910	14th April 1853	William Ogden.
Improvements in distillation; apparatus connected therewith; also applicable to other purposes in which substances are to be treated by the assistance of a vacuum - - - -	1018	27th April 1853	Joseph Palin. Robert William Sievier.
Pneumatic apparatus for pumping or forcing air -	1019	27th April 1853	Samuel Groves.
Apparatus for vapourizing benzole or other suitable volatile hydro-carbon, and mixing it with atmospheric air, so that the mixture may be burnt for the purposes of illumination or otherwise.	1047	29th April 1853	Oliver P. Drake.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR, &c.—*continued.*			
Construction or manufacturing of tew-irons -	1139	9th May 1853	Peter Wright.
Apparatus for the transmission of aëriform bodies -	1152	10th May 1853	Alexander Chaplin.
Mode of feeding machines for opening, cleaning, blowing, and scutching cotton and other fibrous substances.	1178	12th May 1853	Charles Pooley.
Method of roasting coffee, cocoa, and chicory -	1213	17th May 1853	George Berry.
Drying bricks, peat, and other articles - - (*Fan for supplying air.*)	1228	18th May 1853	John Barsham.
Fans, blasts, or blowing apparatus - -	1379	4th June 1853	Joseph Burch.
Obtaining certain saline compounds from solutions containing such compounds.	1455	15th June 1853	William Gossage.
Improved process for preserving milk, and its application to several organic products and alimentary substances.	1467	16th June 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of glasshouse pots - - -	1486	18th June 1853	Edgar Breffit.
Steam engines; production of steam for the same -	1491	18th June 1853	John Moore Hyde.
Preparing and finishing certain worsted yarns; apparatus employed therein.	1501	20th June 1853	Robert Midgley.
Distillation of fatty and oily matters - -	1538	24th June 1853	John Webster.
Supplying ships or other vessels with water, air, or ballast.	1808	2nd Aug. 1853	Matthias Edward Boura.
Treating fibrous substances - - -	1923	17th Aug. 1853	Felix Alexandre Victor Delarbre.
Manufacture of certain mineral oils and paraffine -	1953	22nd Aug. 1853	Auguste Edouard Loradoux Bellford.
A machine for destroying weeds - - (*Blowing hot air.*)	1965	23rd Aug. 1853	William M'Leish.
Process of dyeing;—partly applicable to bleaching - (*Exhausting the air from vats.*)	2012	30th Aug. 1853	Alfred Vincent Newton.
An improved construction of blower - -	2039	3rd Sept. 1853	Gage Stickney.
Distillation of turpentine and other resinous substances and their products.	2144	15th Sept. 1853	Thomas William Keates.
Treating, stretching, or finishing textile fabrics; machinery or apparatus for effecting the same -	2217	27th Sept. 1850	Isaac Bury. William Green.
Machinery for raising or propelling elastic and non-elastic fluids. (*Centrifugal fans.*)	2290	6th Oct. 1853	Charles Augustus Holm.
Apparatus for compressing or rarefying air or other elastic fluids. (*Communicated by Germain Sommeiller.*)	2295	7th Oct. 1853	John Henry Johnson.
Vessels for preserving leeches and fish alive - -	2308	8th Oct. 1853	George Lifford Smartt.
Moulding of bricks and other articles of like materials.	2336	11th Oct. 1853	John Francis Porter.
Bleaching and drying of fibres or fibrous materials; —partly applicable to the drying of woven and other textile manufactures.	2426	20th Oct. 1853	Julius Augustus Roth.
Construction of organs and free-reed instruments -	2634	14th Nov. 1853	Henry Willis.
Improvements in acting on drying-oils; preparing varnishes. (*Excluding the air from the heating vessels.*)	2961	20th Dec. 1853	John Webster.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR, &c.—*continued.*			
Method of obtaining power to raise liquids; treating the said liquids when raised; using them to obtain additional power. (*Producing a vacuum.*)	2973	22nd Dec. 1853	John Youil.
Portable forges	3036	31st Dec. 1853	Richard Waygood.
V.—Ventilating Buildings, Mines, Ships, Sewers, Carriages, Wearing-Apparel.			
A thermostat or apparatus for the regulation of ventilation, &c. (*In apartments.*)	42	6th Jan. 1853	William Sykes Ward.
Certain improvements in the transmission and the emission of air and sound.	51	7th Jan. 1853	Hezekiah Marshall.
Apparatus for refrigerating (*Cooling apartments.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Production and application of heated air (*Ventilating apartments.*)	155	21st Jan. 1853	William Taylor.
Machinery for exhausting and driving atmospheric air (*Ventilating mines.*)	300	3rd Feb. 1853	William Richards. Edwin Beck.
Improvements applicable to steam-pipes used for ventilating, &c.	437	21st Feb. 1853	Wright Jones.
Measuring the steerage-way of vessels and the rapidity of currents of water and air;—applicable to ventilating ships and railway-carriages. (*Communicated by Messrs. Owerdwynand Droinet.*)	606	9th March 1853	Frederick William Campin.
Certain improvements in ventilating	675	18th March 1853	Robert Oates Christian.
Improvements in locomotive-engines (*Ventilating ships' holds.*)	786	2nd April 1853	Sir James Caleb Anderson, Bart.
Warming and ventilating rooms and buildings	837	7th April 1853	Edward Langdon Bryan.
Ventilating mines, sewers or drains, ships, buildings generally, and other localities.	951	20th April 1853	Samuel Weight.
Improvements in ventilating bricks	1090	4th May 1853	John Houseman Hutchinson.
Construction of buildings	1111	5th May 1853	William Buckwell.
Improvements in weaving (*Ventilating the weaving-room.*)	1209	16th May 1853	Robert Boyd.
Ventilating mines	1212	16th May 1853	George Jones.
Heating and ventilating	1280	25th May 1853	James Lovell.
Fans, blasts, or blowing apparatus	1379	4th June 1853	Joseph Burch.
Ventilating mines	1381	4th June 1853	Benjamin Biram.
Hats and other coverings for the head	1623	7th July 1853	John Knox Stuart.
Ventilating mines	1663	13th July 1853	Thomas Hill Bakewell.
Improvements in safety-lamps, part or parts of such improvements being applicable to the consumption or prevention of smoke, and purposes of ventilation generally.	1851	9th Aug. 1853	Thomas Young Hall.
Improvements applicable to ventilation and other purposes.	1925	17th Aug. 1853	Thomas Kirkwood.
Apparatus for heating	2002	29th Aug. 1853	Peter Armand le Comte de Fontainemoreau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR, &c.—*continued.*			
An invention for the better ventilation of field tents and marquees.	2078	9th Sept. 1853	John Doyle.
Ventilating, and preventing spontaneous combustion in ships and other vessels laden with coal, culm, or cinders.	2097	10th Sept. 1853	Robert Tronson.
Opening and closing ventilating louvres - -	2174	19th Sept. 1853	Thomas Restell.
Apparatus for heating water and other fluids -	2333	11th Oct. 1853	James Harris.
Improvements in ventilating - - -	2369	14th Oct. 1853	William Palmer.
Apparatus for regulating the hygrometric state of the air in buildings, rooms, &c.	2448	24th Oct. 1853	Henry Kraut.
Manufacture of boots and shoes - - -	2466	25th Oct. 1853	Charles Goodyear.
Ventilating drying-stoves - - -	2676	18th Nov. 1853	Thomas Holmes.
Apparatus for heating water and other fluids - (*Heating air for ventilating buildings.*)	2688	19th Nov. 1853	James Harris.
Ventilating sewers, mines, or other subterranean works.	2814	3rd Dec. 1853	Abraham Rogers.
Preventing drafts of air in rooms and places when the doors and windows are shut.	2942	17th Dec. 1853	John Greenwood.
Ventilation of granaries, storehouses, or other places of deposit for grain; grinding of grain and dressing of grist; grinding generally.	2950	19th Dec. 1853	William Crossby.
Improvements in ascending and descending mines and shafts, and in apparatus connected therewith, by which improvements the ventilation of mines is increased.	3027	30th Dec. 1853	Joseph Marlor.
ALKALIES AND ALKALINE SALTS; SALTS OF MAGNESIA.			
Apparatus for the manufacturing of prussiate of potash.	43	6th Jan. 1853	William Watson.
Manufacture of certain salts of soda - -	74	11th Jan. 1853	Thomas Cottrill.
Apparatus for refrigerating - - - - (*Precipitating alkaline salts.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Process of and apparatus for distilling certain vegetable and mineral matters, also animal bones and flesh. (*And obtaining ammonia.*)	174	24th Jan. 1853	David Clovis Knab.
Manufacture of carbonate of soda and potash -	321	5th Feb. 1853	Charles Frederic Werckshagen.
Manufacture of certain compounds of phosphoric acid.	479	25th Feb. 1853	Thomas Richardson.
Manufacture of alkalies and their salts - - (*Sulphate and carbonate of soda.*)	731	26th March 1853	George Robb.
Manufacture of certain salts and oxydes of metals - (*And solutions of soda, potash and ammonia.*)	741	28th March 1853	George Edward Dering.
Manufacture of alkalies and their salts - - (*Sulphate and carbonate of soda and potash.*)	788	2nd April 1853	George Robb.
Manufacture of soda-ash or carbonate of soda from common salt.	811	5th April 1853	Edmond Stanley Stanley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ALKALIES, &c.—*continued.*			
Manufacture of alkali - - -	887	13th April 1853	George Elliot. William Russell.
Manufacture of soda and potash - -	945	19th April 1853	Christian Böhringer. Gustavus Clermm.
Manufacture of alkali from common salt - -	1232	18th May 1853	William Gossage.
Purification of coal gas for the purposes of illuminating and heating; obtaining by the ingredients used therefor manures, salts of ammonia, and sulphur.	1258	21st May 1853	William Chisholm.
Manufacture of potash and soda-ash - -	1399	7th June 1853	Alexander McDougall.
Manufacture of certain salts of magnesia and a red colouring matter. (*Carbonate and sulphate.*)	1441	14th June 1853	Thomas Richardson.
Obtaining certain saline compounds from solutions containing such compounds. (*Salts of soda.*)	1455	15th June 1853	William Gossage.
Manufacture of alkali from common salt - -	1490	18th June 1853	James Shanks.
Manufacture of soap and washing-paste and of the materials used therein - - -	1641	9th July 1853	Pierre Auguste Tourniere. Louis Nicolas de Meckenheim.
Manufacture of alkali and chlorine - -	1647	11th July 1853	William Cormack.
Generating and fixing ammonia - - -	1750	25th July 1853	Charles Frederick Spieker.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Mons. Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Manufacture or production of alkalies and their salts, or alkaline salts.	1949	20th Aug. 1853	Alexander Cuninghame.
Apparatus for manufacturing prussiate of potash -	1984	26th Aug. 1853	William Watson, junior.
Obtaining certain saline compounds from solutions containing such compounds. (*Sulphate of soda.*)	2269	4th Oct. 1853	William Gossage.
Carbonizing and distilling peat, coal, wood, and other animal, vegetable, and mineral substances. (*And obtaining ammonia.*)	2435	21st Oct. 1853	Jean François Felix Challeton.
Manufacture of quinine and other alkaloids -	2646	15th Nov. 1853	John Hall Brock Thwaites. William Bird Herapath, M.D.
Manufacture of an artificial tartaric acid; application of the same to useful purposes. (*Producing tartrates.*)	2831	6th Dec. 1853	Auguste Edouard Loradoux Bellford.
Distillation of organic substances; obtaining products therefrom. (*Obtaining compounds of ammonia and cyanogen.*)	2868	9th Dec. 1853	John Chisholm.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ALUM.			
Applying to illuminating the extract of bituminous products of coal, peat, and lignites; rectifying and depurating the essences and greasy matter from coal. (*And obtaining crystallized alum.*)	770	31st March 1853	William Augustus Pascal Aymard.
Manufacture of alum - - - -	2274	5th Oct. 1853	James Thomson Wilson.
ANCHORS (*making and fishing*).			
Capstans - - - - - (*For heaving anchors.*)	510	1st March 1853	William Edward Newton.
Improvement in anchors - - - -	1142	10th May 1853	James Brown.
Anchors;—"The Ferdinand Martin Safety Anchor"	1222	18th May 1853	John Haskett.
Improvements in anchors - - -	1257	21st May 1853	Joseph Betteley.
Depositing metals or alloys of metals - -	1777	29th July 1853	William Edward Newton.
Manufacture of anchors - - - -	2241	1st Oct. 1853	Caleb Bloomer.
Improvement in anchors - - - -	2253	3rd Oct. 1853	Michael Dwyer. James Brown.
Construction of anchors - - -	2314	10th Oct. 1853	Robert James Maryon.
Improvements in anchors - - -	2603	10th Nov. 1853	William Rodger.
Improvements in anchors - - -	2679	18th Nov. 1853	William Taylor.
ASH-PITS AND DUST-PANS.			
An improved dust-pan - - - -	260	31st Jan. 1853	Marc Louis Adam Farin.
Means of gathering cinders and depositing ashes under fire-grates; securing economy in fuel and cleanliness of appearance.	599	9th March 1853	George Chambers.
Ash-pits for grates - - - -	2601	10th Nov. 1853	James Atkins.
AXLES, JOURNALS, BEARINGS, AXLETREES, AND BOXES.			
Axle-boxes - - - - -	15	4th Jan. 1853	Peter Armand le Comte de Fontainemorean.
Construction of bearings or steps for shafts, turn-tables, or moveable platforms—"Parry's improvements."	39	6th Jan. 1853	William Edward Newton.
Application of steam to the propulsion of carriages on common roads;—partly applicable to the construction of carriages for common roads. (*And axles.*)	53	8th Jan. 1853	Robert Lovely.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AXLES, &c.—*continued.*			
Machinery for shaping metals - - - (*For making taper axletrees.*)	82	12th Jan. 1853	John Arrowsmith.
Combining metals for the bearings, &c. of machinery	217	28th Jan. 1853	James Pole Kingston.
Securing axles in their boxes - - -	392	15th Feb. 1853	Frederick Chinnock.
Improvements in the permanent way of railways - (*Bearings.*)	413	17th Feb. 1853	James Murphy.
Railway-carriages; connecting and disconnecting the same.	499	28th Feb. 1853	Thomas Edward Merritt.
Manufacture of wheels and axles - - -	574	7th March 1853	Thomas Weatherburn Dodds.
Steam-engines; apparatus connected therewith - (*Bearings for the piston-rod.*)	797	4th April 1853	William Beckett Johnson.
Improvements in axletree boxes - - -	841	7th April 1853	Leopold Joseph Green.
Machinery for preparing and spinning cotton and other fibrous substances. (*Constructing bearings.*)	1005	27th April 1853	William Johnson.
Bearings for axles; axle-boxes and bushes - -	1063	2nd May 1853	Daniel Reading.
Improvements in carriages - - - -	1370	3rd June 1853	William Edward Maude.
A mechanism of a new construction, having as its end the prevention of the loss of force caused till now by friction, to diminish the oiling till now necessary, and to prevent the heating of the axle-trees in revolving.	1372	4th June 1853	Carl Fedor Lenz.
Axle-boxes, guides, and bearings of locomotive-engines and carriages;—partly applicable to the bushes and bearings of machinery.	1437	14th June 1853	William C. Craig.
Improvements in axles - - - -	1454	15th June 1853	John Jeremiah Payne.
Reducing the friction of journals of railway and other carriages;—applicable to the journals of machinery.	1469	16th June 1853	Clinton Roosevelt.
Axle-boxes for locomotive-engines, railway and other carriages;—applicable to the bearings of machinery - - - - -	1473	16th June 1853	Solomon Solomon. Samuel Mills.
Machinery or apparatus for preparing and spinning cotton and other fibrous materials - - (*Bearings.*)	1555	27th June 1853	John Mason. Luke Ryder.
Axles or axletrees - - - -	1557	27th June 1853	George French.
Improvements in carriages, scaffoldings, and ladders, which scaffoldings are used as carriages. (*Axles.*)	1599	4th July 1853	Marcus Davis.
Axle-box for railway carriages and waggons - -	1952	22nd Aug. 1853	John Steven.
Railway-carriage axles - - - -	2043	5th Sept. 1853	John Smalley. Washington Smirk.
Method of forging or manufacturing iron and steel -	2116	13th Sept. 1853	Henry Dubbs.
Lubricating shafts or revolving metallic surfaces -	2158	16th Sept. 1853	Andrew Barclay.
Construction of railway-carriages - - -	2376	15th Oct. 1853	Frederick Samson Thomas.
Construction of railroad-carriage axle - -	2462	25th Oct. 1853	Alfred Vincent Newton.
Carriage axles - - -	2538	2nd Nov. 1853	Edward Ward.
Improvements in the manufacture of malleable iron, which improvements are also applicable to the manufacture of other malleable metals. (*For making axles.*) (*Communicated by Clement Desormes.*)	2568	4th Nov. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AXLES, &c.—*continued.*			
Spindles and bearings of lathes and drilling-machines, and other spindles and bearings.	2580	7th Nov. 1853	John Todd.
Steps or bearings of the axles or shafts of gas-meters	2604	10th Nov. 1853	James Stevens.
Bearings for machinery - - - -	2607	11th Nov. 1853	William Parker.
Railway wheels, axles, and boxes - - - (*Also bearings.*)	2845	8th Dec. 1853	William Bridges Adams.
Slubbing and roving frames for cotton and other fibrous substances - - - - (*Forming spindle-bearings.*)	2865	9th Dec. 1853	Richard Eccles. John Mason. Leonard Kaberry.
Construction of railway axles and breaks - -	2875	9th Dec. 1853	Henry Bessemer.
Electric telegraphs and apparatus connected therewith. (*Bearings.*)	3031	31st Dec. 1853	Henry Vernon Physick.
BAGS, PURSES, RETICULES.			
Method of dressing lamb-skin leather and cleaning the wool therefrom - - - - (*For making purses.*)	230	29th Jan. 1853	John Ryall Corry. James Barrett Corry.
Machinery for manufacturing bags or envelopes of paper, calico, or textile fabrics.	541	3rd March 1853	John Wright.
Saddlery and harness - - - - (*Nosebags.*)	595	9th March 1853	Samuel Blackwell.
Weaving; machinery employed therein - -	818	5th April 1853	William Johnson.
Machinery for weaving seamless goods - -	854	8th April 1853	Stephen Taylor.
Means of depriving caoutchouc of all unpleasant odour, and of imparting to it various agreeable perfumes.	1982	26th Aug. 1853	Eugène de Varroc.
Manufacture of purses, cigar-cases, reticules, bags, tobacco-pouches, and other similar articles.	2146	15th Sept. 1853	Ludwig Frederick Herman Christoph Knuth.
Making of paper bags - - - -	2190	22nd Sept. 1853	James Baldwin.
BATHS AND BATHING.			
An improved bath - - - -	293	3rd Feb. 1853	William Scarlett Wright.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*For covering baths.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
An improved bath, which can also be used as a life-boat.	446	21st Feb. 1853	Benjamin Barton.
Construction and arrangements of kitchen-boilers and flues for ranges.	490	26th Feb. 1853	Ebenezer Thornton.
A podombrosalontron, or an improved apparatus for either sponge or shower bath, and all lavatory purposes.	726	26th March 1853	Robert Hazard.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BATHS, &c.—*continued.*			
Certain instruments, apparatus, and articles for the application of electro-galvanic and magnetic action for medical purposes.	806	4th April 1853	Antoine Burq.
Certain improvements in baths, part of which improvements are also applicable to table fountains.	1011	27th April 1853	James Dinning.
Application of baths to articles used for resting the human body.	1512	20th June 1853	Joseph Skertchley.
Means of carrying, bedding and bathing the injured, ill, or invalid persons.	1826	4th Aug. 1853	Barthelemy Louis François Xavier Fléchelle.
Improvements in baths - - - -	2080	9th Sept. 1853	Charles Askew.
Apparatus for heating water or other liquids -	2207	24th Sept. 1853	Charles Maitland. William Gorrie.
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for baths, &c.	2340	12th Oct. 1853	Nicholas Callan.
BELL-FOUNDING.			
Manufacture of turret or clock-tower and such like bells.	1636	9th July 1853	Ewald Riepe.
Manufacture of large bells - - - -	2319	10th Oct. 1853	Frederick Warner. John Shotton.
BILL-HOLDERS.			
Bill or letter holders - - - -	511	1st March 1853	Edward Charlesworth.
BILLIARDS, CHESS, AND DOMINOES.			
Improvements applicable to apparatus used for making or scoring at billiards and other games.	164	22nd Jan. 1853	William Sharples.
Manufacture of chess-boards and chess-men - -	1589	2nd July 1853	John Jaques, junior.
An improved domino-bearer - - - -	1725	21st July 1853	Simon Charles Mayer.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BLACKING.			
Preparation of a black powder from coal; application thereof to the manufacture of blacking and various other purposes.	1900	13th Aug. 1853	John Gwynne.
Treatment of lignite or wood-coal; obtaining various useful products therefrom.	2343	12th Oct. 1853	Edme Jules Maumené.
BLEACHING AND DECOLOURIZING.			
Machinery to be used in bleaching, &c. yarns and fabrics.	11	3rd Jan. 1853	John Bleackley.
Preparing and bleaching jute and other vegetable fibres - - - - - - -	87	12th Jan. 1853	John Capper. Thomas John Watson.
Bleaching animal and vegetable fibrous materials -	191	25th Jan. 1853	Robert William Sievier. Robert William Waithman.
Bleaching and dyeing - - - -	214	28th Jan. 1853	Louis Christian Koeffler.
Treatment, cleansing, or finishing of textile fabrics - (*Also bleaching.*)	355	10th Feb. 1853	William Fulton.
Treatment of oleaginous, fatty, or gelatinous substances for purifying, decolourizing, compounding, or clarifying the same.	377	12th Feb. 1853	William Pidding.
Manufacture of articles made of gutta-percha - (*Decolourizing gutta-percha.*)	395	15th Feb. 1853	Alphonse Rene le Mire de Normandy.
Method of bleaching and deodorizing resin oil during the process of manufacture.	483	25th Feb. 1853	Frederick Goodell.
Bleaching or sulphuring silk, woollen, cotton, and other woven fabrics and yarns.	590	8th March 1853	John Colquhoun,
Method of preparing, treating, and finishing cut-piled or raised fustians and other similar goods or fabrics; machinery or apparatus connected therewith.	732	26th March 1853	James Worrall, junior.
Method of preparing, treating, and finishing certain textile fabrics called cords, thicksets, velveteens, and beaverteens.	768	30th March 1853	James Worrall, junior.
Apparatus used in bleaching - - -	1045	29th April 1853	Colin Mather.
Method of treating flax and hemp whereby they are brought to such a state that they may be carded, spun, and woven by machinery such as is now employed in the manufacture of cotton and wool into yarn and cloth.	1267	23rd May 1853	Auguste Edouard Loradoux Bellford.
Machinery for treating the fibres of flax, hemp, china-grass and other analogous substances, preparatory to spinning.	1302	26th May 1853	Julius Augustus Roth.
Bleaching of oils and fats; machinery and apparatus connected therewith.	1444	15th June 1853	George Burstall.
Apparatus for bleaching, &c. fustians, beaverteens, cantoons, satteens, twills, and other textile fabrics.	1493	18th June 1853	James Worrall.
Machinery or apparatus for bleaching or cleansing textile fabrics or materials - - -	1741	23rd July 1853	Samuel Barlow, junior. John Pendlebury.
Purification of resin oil - - - -	1920	16th Aug. 1853	Alfred Vincent Newton.
Process of dyeing;—partly applicable to bleaching -	2012	30th Aug. 1853	Alfred Vincent Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BLEACHING, &c.—*continued.*			
Machinery or apparatus for bleaching, &c., woven fabrics.	2038	3rd Sept. 1853	Albert Nagles.
Mode of bleaching fibrous and other substances -	2061	9th Sept. 1853	Cyprien Marie Tessié Du Motay. Edmond Louis Duflos.
Treating and bleaching resinous substances -	2167	17th Sept. 1853	Henry Constantine Jennings.
Treating, stretching, or finishing textile fabrics; machinery or apparatus for effecting the same - (*Removing colour from.*)	2217	27th Sept. 1853	Isaac Bury. William Green.
Manufacture of pulp for paper-makers - -	2219	28th Sept. 1853	Moses Poole.
Bleaching and drying of fibres or fibrous materials;—partly applicable to the drying of woven and other textile manufactures.	2426	20th Oct. 1853	Julius Augustus Roth.
Treatment of fibrous materials other than flax and hemp.	2468	25th Oct. 1853	Marcus Davis.
Bleaching apparatus - - - -	2637	14th Nov. 1853	Anthony Park Coubrough.
Bleaching oils and fats - - -	2715	22nd Nov. 1853	Frederick Meyer.
Method of purifying and concentrating the colouring matter of madder, munjeet, spent madder, or any preparations thereof, however they may be made. (*Extracting colour from printed goods.*)	2776	29th Nov. 1853	Edward Joseph Hughes.
Process of bleaching vegetable fibrous substances - (*Communicated by Charles Custer.*)	2948	19th Dec. 1853	John Tribelhorn. Dr. Pompejus Bolley.
Apparatus for bleaching, &c. - - -	2988	24th Dec. 1853	Joseph Gaultier.
BOBBINS.			
Machinery for spinning flax and tow - -	180	24th Jan. 1853	John Stevenson.
Manufacture of bobbins - - - -	494	26th Feb. 1853	Charles Tetley.
Manufacture of bobbins and spools - -	616	11th March 1853	Francis Preston.
Improved kind of loom - - - - (*Shuttle bobbins.*)	645	15th March 1853	François Durand.
Machinery or apparatus for preparing and spinning cotton and other fibrous materials - -	781	1st April 1853	Henry Spencer. Henry Tattersall. Hugh Simpson.
Machinery for spinning, doubling, and twisting cotton and other fibrous substances.	1406	9th June 1853	Henry Bernoulli Barlow.
BONNETS; FASTENING BONNETS.			
Manufacture of bonnets, &c.;—applicable to other articles of wearing-apparel.	268	31st Jan. 1853	Thomas Charles Clarkson.
Improvements in bonnets - - - -	863	11th April 1853	Robert Garrard. John Garrard

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BONNETS, &c.—*continued.*			
Machinery and apparatus for the manufacture of bonnets, &c.	1322	28th May 1853	Henry Charles Hill.
Manufacture of fabrics made of silk, cotton-wool, flax, hemp, straw, grasses, fibres, mohair, and other hair, spun-glass, and enamelled, glazed, or plain wire; application of some of those materials; machinery or apparatus connected therewith. (*For bonnets.*)	2602	10th Nov. 1853	William Pidding.
Improvements in bonnets and other coverings for the head.	2920	16th Dec. 1853	Walter George Whitehead.
BOOK BINDING AND COVERING.			
Method of dressing lamb-skin leather and cleaning the wool therefrom - - - - - (*For bookbinding.*)	230	29th Jan. 1853	John Ryall Corry. James Barrett Corry.
Colouring matter for coating or covering the exterior or interior of buildings, some of the ingredients of which such colouring matter is composed being capable of conversion into size, paste, and ground colour, for priming or giving the first coat or covering to work intended to be covered with oil paint. (*Paste used in bookbinding.*)	292	3rd Feb. 1853	John Heckethorn.
Bookbinding - - - - - -	406	16th Feb. 1853	Edouard Sy.
Improvements in bookbinding to facilitate the finding of places in books.	407	16th Feb. 1853	John George Perry.
Binding or covering books - - -	1080	3rd May 1853	Frederick Arnold.
Improvements in bookbinding - - -	1125	7th May 1853	James Nichol.
Application and combination of glass, porcelain, stoneware, earthenware, terra-cotta, composition in plaster called scagliola and majolica ware.	1480	17th June 1853	James Hogg.
An improvement or improvements applicable to writing-slates, pocket and memorandum books, and other such like articles.	1939	18th Aug. 1853	Thomas Hughes.
Certain improvements in bookbinding - - (*Backing books.*)	2914	15th Dec. 1853	Charles John Morris.
An improvement applicable to the binding of ledgers and other books.	2994	24th Dec. 1853	Thomas Cooper.
BOOTS, SHOES, CLOGS, &c.; CLEANING BOOTS.			
Manufacture of travelling-cases, wrappers, and certain articles of dress hitherto manufactured of leather - - - - - (*Slippers.*)	17	4th Jan. 1853	Joseph James Welch. John Stewart Margetson.
Manufacture and treatment of leather, either alone or in combination with other materials. (*For boot and shoe soles.*)	36	6th Jan. 1853	Robert Whinery.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Boots, &c.—*continued.*			
Boots, shoes, and that kind of spatterdashes termed antigropelos	59	8th Jan. 1853	Francis Parker. William Dicks.
Manufacture of boots	184	25th Jan. 1853	Thomas Ovans.
Rotary heel for boots and shoes	244	31st Jan. 1853	Thomas Knox.
Heels for boots, shoes, and other coverings for the feet.	289	2nd Feb. 1853	Thomas Paine.
A new application of a system to render boots and shoes waterproof without sewing or nailing whatever; also the application of machines to the manufacturing of general shoemaking, &c.	296	3rd Feb. 1853	Benoit Dulaurier.
An improved boot, particularly suitable for the use of emigrants and persons at sea.	311	4th Feb. 1853	William Edgar.
Coverings for the feet of bipeds or quadrupeds	442	21st Feb. 1853	William Pidding.
Manufacture of boots, shoes, clogs, and slippers	542	3rd March 1853	Thomas Crick.
Cutting out parts of boots and shoes	547	4th March 1853	Joseph Sparkes Hall.
Treating sheets of caoutchouc or gutta-percha so as to render the same fit for ornamental coverings. (*For boots and shoes.*)	598	9th March 1853	William Pidding.
Boots, shoes, and clogs; machinery or apparatus and materials connected therewith.	757	29th March 1853	Julian Bernard.
Manufacture of boots and shoes whereby great ease is secured to the wearer.	946	19th April 1853	Thomas Day.
Machine for pegging boots or shoes (*Communicated by Edward L. Norfolk.*)	1195	14th May 1853	Moses Poole.
Manufacture of boots and shoes	1206	16th May 1853	Jean Jacques Joseph Jamin. Alexander Symons.
Apparatus for cleaning boots and shoes	1250	20th May 1853	Henry Gilbert.
Plastic compound applicable to various ornamental and useful purposes. (*For making boot-soles.*)	1260	21st May 1853	Henri Joseph Scoutetten.
Manufacture of soles for boots, shoes, and other coverings for the feet.	1360	2nd June 1853	William Edward Newton.
Manufacture of lasts; machinery connected therewith; partly applicable to other like purposes of eccentric turning.	1564	29th June 1853	Thomas Edward Irons.
Adhesive soles and heels for boots and shoes; apparatus used for preparing and applying the same.	1705	16th July 1853	John Wallace Duncan.
Manufacture of boots and shoes	1771	28th July 1853	Thomas Forster.
Manufacture of boots and shoes	1905	13th Aug. 1853	Edward John Scott.
Waterproofing of boots and shoes (*And making.*)	2041	5th Sept. 1853	John Doyle.
Method of blocking leather used in the manufacture of boots.	2182	20th Sept. 1853	William Stockil.
Manufacture of boots and shoes	2466	25th Oct. 1853	Charles Goodyear.
Machinery or apparatus for sewing or stitching	2473	26th Oct. 1853	Edward Joseph Hughes.
Machinery or apparatus for making metal tips for shoes and clogs.	3025	30th Dec. 1853	Benjamin Swire.
Compositions to be employed as substitutes for caoutchouc, gutta-percha, and certain fatty bodies. (*For soles and uppers.*)	3045	31st Dec. 1853	Stanislas Tranquile Modeste Sorel.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BORING, PUNCHING, DRILLING.			
Application of steam to the propulsion of carriages on common roads; partly applicable to the construction of carriages for common roads. (*And drilling.*)	53	8th Jan. 1853	Robert Lovely.
Railways - - - - - (*Boring.*)	412	17th Feb. 1853	William Bridges Adams.
Machinery for the manufacture of casks, barrels, and other similar vessels. (*Boring bung-holes.*)	476	25th Feb. 1853	John Grist.
Machinery for slotting, tenoning, mortising, grooving, drilling, boring, and vertical planing -	602	10th March 1853	John Powis. Jabus Stanley James.
Manufacturing casks, vats, and other like vessels; machinery or apparatus to be employed for such purpose - - - - - (*Punching apparatus.*)	636	14th March 1853	Bennett Alfred Burton. Henry Mortimer Burton.
Machine for mortising and tenoning, drilling and boring.	663	18th March 1853	Richard Peters.
Block-making machinery - - - (*Holding the blocks for boring.*)	710	23rd March 1853	William Mann Crossland.
Production of ornamental surfaces in glass, porcelain, metals, and similar materials. (*Punching.*)	828	6th April 1853	William Johnson.
Machinery for cutting, carving, and engraving wood, stone, metal, and other suitable materials.	856	9th April 1853	George Searby.
Machinery for cutting and uniting metals - - (*Punching.*)	867	11th April 1853	Hugh Donald.
Cutting out and piercing metals - - -	897	13th April 1853	Thomas Lovell Preston.
Machinery for perforating or punching paper, card, and other materials.	1350	2nd June 1853	Joseph Whitworth.
Producing railway and other tickets and cards - (*Punching.*)	1485	18th June 1853	Guy Hannington.
Machinery for drilling or boring rocks or other hard substances.	1506	20th June 1853	William Edward Newton.
Manufacture of files, rasps, and other edge tools usually made of steel. (*Augers and rose-bits.*)	1530	23rd June 1853	Thomas Weatherburn Dods.
Machinery for boring metals - - -	1703	16th July 1853	Samuel Colt.
Improvements in lathes, and in apparatus connected therewith, for cutting, turning, or boring wood, metal, or other substances.	2103	12th Sept. 1853	William Weild.
Tools or implements to be used for boring or cutting rock or other hard substances for the purpose of blasting.	2143	15th Sept. 1853	Henry Kraut.
Manufacture of crates made of wood for the use of potters. (*Drilling.*)	2194	22nd Sept. 1853	Thomas West Walker.
Improvements in lathes - - - - (*For boring.*)	2204	24th Sept. 1853	Alexander Dalgety.
Machines for drilling or boring metals or other substances.	2296	7th Oct. 1853	Joseph Porter.
Joining the ends of railways - - -	2311	8th Oct. 1853	Charles May. James Samuel.
Means of cutting, carving, engraving, piercing, or embossing metallic or other surfaces.	2382	15th Oct. 1853	Thomas Woodcock.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BORING, &c.—*continued.*			
Adhesive stamps and labels - - - (*Perforating postage-stamps.*) (*Provisional protection not granted.*)	2422	20th Oct. 1853	John Coope Haddan.
Machinery or apparatus for cutting, boring, and shaping metals and other substances.	2508	31st Oct. 1853	Joseph Haley.
Certain improvements in cutting-tools and in the working of iron, brass, and other metals, and wood and other materials - - - -	2526	1st Nov. 1853	John Whitehead. Thomas Whitehead.
Spindles and bearings of drilling-machines - -	2580	7th Nov. 1853	John Todd.
Machinery for drilling or boring rocks and other hard substances.	2854	8th Dec. 1853	William Edward Newton.
Machinery for the production of iron ships and other similar structures. (*Punching the plates.*)	2873	9th Dec. 1853	John Bourne.
Machinery for manufacturing needles and fish-hooks. (*Piercing-machine.*)	2947	19th Dec. 1853	Henry Milward.
Apparatus for drilling or boring metals and other substances.	2993	24th Dec. 1853	Joseph Lewis.
For perforating Bricks, *see* "BRICKS," &c.			
BOTTLES, JARS, PROVISION CASES; CAPSULES, STOPPERS, AND STOPPERING; CLEANING BOTTLES.			
Manufacture of "species jars" or show jars -	9	1st Jan. 1853	Matthew Tomlinson.
Mode of securing and retaining corks and stoppers in bottles.	49	7th Jan. 1853	Herbert George James.
Rendering bottles, jars, and other like receptacles air and water tight; raising and measuring the liquid contents thereof.	62	10th Jan. 1853	Charles Stewart Duncan.
Closing or stoppering bottles, jars, and other receptacles.	215	28th Jan. 1853	Joseph Scott.
Stoppering apparatus for bottles containing liquids of which small quantities are generally poured out at a time.	282	2nd Feb. 1853	Auguste Edouard Loradoux Bellford.
Stopping bottles and other vessels - - -	359	10th Feb. 1853	Robert Ash.
Construction and mode of closing scent and other bottles.	369	12th Feb. 1853	Thomas Robert Mellish.
Apparatus for applying metallic capsules - -	885	12th April 1853	Alexander Edward Dudley Knox Archer.
Modes of cleansing bottles or other similar articles -	918	15th April 1853	William Allen. William Murrell.
Manufacture of metallic covers or seals for bottles, jars, and other like vessels; applying or affixing them.	1119	6th May 1853	George William Jacob.
System of stoppering vessels and bottles - -	2227	28th Sept. 1853	Jean Alexandre Labat, jun.
Improvements in soldiers' or mess canteens and other articles for containing food.	2271	5th Oct. 1853	Joseph Holmes.
Apparatus for fixing capsules on the necks of bottles and other vessels.	2275	5th Oct. 1853	Henry John Betjemann.
Apparatus for applying metallic capsules - -	2302	8th Oct. 1853	Alexander Edward Dudley Knox Archer.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BOTTLES, &c.—*continued.*			
Stoppers or covers for bottles; tools or apparatus for manufacturing the same.	2346	12th Oct. 1853	George Bradley.
Apparatus for the manufacture of aërated liquids - (*Corking.*)	2366	14th Oct. 1853	Andrew M^c^Lean. William Fraser Rae.
Manufacture of certain kinds of metallic vessels -	2482	26th Oct. 1853	Amedée François Rémond.
Machinery for manufacturing metallic capsules -	2506	29th Oct. 1853	William Betts.
Stopping of bottles containing aërated liquids -	2534	2nd Nov. 1853	William Taylor.
Improvements in portable cases containing provisions. (*Communicated by Alexandre Desiré Eugène Boucher.*)	2669	9th Dec. 1853	John Henry Johnson.
Manufacture of certain kinds of metallic vessels - (*Metallic bottles.*)	2688	17th Dec. 1853	Joshua Horton.
For Corks, *see* "CUTTING, &c."			
BOTTLING.			
Filling vessels with aërated waters; apparatus employed therein.	876	12th April 1853	Auguste Mondollot.
Apparatus for bottling or supplying vessels with fluids.	1269	23rd May 1853	John Harcourt Browne.
BOXES, TRUNKS, AND CASES.			
Manufacture of travelling-cases, wrappers, and certain articles of dress hitherto manufactured of leather - - - - - - - (*Also portmanteaus.*)	17	4th Jan. 1853	Joseph James Welch. John Stewart Margetson.
Manufacture and treatment of leather, either alone or in combination with other materials. (*For making boxes or portmanteaus, &c.*)	36	6th Jan. 1853	Robert Whinery.
Manufacture of boxes and similar articles; machinery or apparatus to be employed therein.	178	24th Jan. 1853	William Kendall.
Improvements applicable to the construction of temporary dwellings. (*Packing-cases.*)	202	26th Jan. 1853	William Henry Moore.
Manufacture of knobs for doors and other like uses;—partly applicable to the manufacture of certain articles of earthenware - - - (*Paste and patch boxes.*)	320	5th Feb. 1853	John Whitehouse, senior. John Whitehouse, junior.
Portable iron stove - - - - - - (*To serve for packing culinary articles.*)	580	8th March 1853	Thomas Dryland.
Improvements in chests for the use of emigrants, whereby they are also made applicable to other purposes.	635	14th March 1853	John O'Leary.
Manufacture of portable packages - - - (*Trunks, cases, boxes, &c.*)	687	21st March 1853	James Fraser.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Boxes, &c.—*continued.*			
Decoration of furniture panels and other surfaces - (*Work-boxes.*)	882	12th April 1853	Eliza Cunnington.
An improvement or improvements in certain kinds of boxes - - - - -	896	13th April 1853	John Hinks. George Wells.
Manufacture of metallic casks and vessels - - (*Also packing cases.*)	903	14th April 1853	William Laycock.
Certain new combinations of gutta-percha with other materials; method of applying such for use. (*Hat-boxes.*)	906	14th April 1853	John Wallace Duncan.
Cases for containing hats in churches and similar situations.	947	19th April 1853	Edward Vivian.
Combination of materials suitable for the manufacture of boxes, cases, trays, and other like articles.	1022	27th April 1853	Wellington Williams.
Travelling packages - - - - -	1037	29th April 1853	George Thomas Day.
Manufacture of boxes, such as have been hitherto made of pasteboard.	1069	2nd May 1853	Joseph Thomas Wood.
Manufacture of cases for jewellery, for optical and other instruments, miniatures, and other articles.	1075	3rd May 1853	Richard Quin.
Improvements in boxes for containing and igniting matches.	1114	6th May 1853	George Dowler.
Construction of portable houses or portions thereof out of parts which may be used for other purposes. (*Constructing packing-cases.*)	1145	10th May 1853	Gregory Kane.
Manufacture of boxes and other hollow receptacles -	1415	9th June 1853	William Brookes.
Packing goods so as to increase the facility and safety of their transmission from place to place. (*Packing-cases.*)	1674	14th July 1853	André Louis Jules le Chevalier St. André.
Travelling bags - - - - - -	1791	1st Aug. 1853	Philipp Schäfer. Frederick Schäfer.
Desks, work-boxes, dressing-cases, tea-caddies, and similar articles; arrangements and fittings thereof.	1859	10th Aug. 1853	John George Taylor.
An ornamental piece of furniture shaped like a vase, constructed to contain or form a writing and drawing desk.	2772	28th Nov. 1853	Alexander Macomie.
Braces.			
Brace-ends, being a new suspender for trousers, breeches, and drawers.	2063	8th Sept. 1853	Simpson Goy Pape.
Manufacture of braces - - - - -	2710	22nd Nov. 1853	William Mee.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BREWING, CLARIFYING AND STORING MALT AND OTHER LIQUORS.			
Machinery to be used in the process of malting, drying, and seasoning grain, including certain vegetables and other substances.	97	14th Jan. 1853	Joseph Lillie.
Apparatus for refrigerating - - - (*Applicable for purifying beer, &c.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Vessels or apparatus for containing and preserving ale, beer, and other liquids. (*Storing.*)	415	17th Feb. 1853	Matthias Walker.
Mode of treating the extract of malt and hops -	522	2nd March 1853	Edward Duke Moore.
Treating brewery and distillery grains for the production of food for cattle, and for extracting the bitter principle and other products from the refuse hops of breweries.	543	3rd March 1853	James Waterman.
An invention for more thoroughly and effectually cleansing, extracting, and separating or fining ale, beer, porter, bitter beer, India pale ale and other malt liquors, from the yeast, bottoms, barm, sediment, and other extraneous matters and impurities with which it may be in combination.	1009	27th April 1853	Samuel Plimsoll.
Extraction and manufacture of sugar and saccharine matters.	1062	2nd May 1853	Auguste Edouard Loradoux Bellford.
Preparing materials to be employed in making beer and other beverages.	1196	14th May 1853	Herman Dirs Mertens.
A system of permanent circulation of caloric intended to produce and overheat steam, gas, and liquids.	1363	3rd June 1853	Ferdinand Louis Gossart.
A new liquid beverage - - -	1684	15th July 1853	Patrick O'Malley.
Apparatus for heating water or other liquids -	2207	24th Sept. 1853	Charles Maitland. William Gorrie.
Improvements in brewing - - -	2268	4th Oct. 1853	Daniel Towers Shears.
Stands for casks and barrels - - - (*Tilting casks.*)	2304	8th Oct. 1853	Henry Kraut.
Machinery or apparatus for mashing malt - -	2614	11th Nov. 1853	William Steel.
Method of obtaining power to raise liquids; treating the said liquids when raised, and using them to obtain additional power. (*For brewing.*)	2973	22nd Dec. 1853	John Youil.
For Bungs, *see* "CUTTING, &c."			
BRICKS, TILES, BLOCKS, QUARRIES.			
Manufacture of a vitrified substance, and its application alone or in combination with mineral, earthy, and plastic substances, to various useful purposes in the arts, and for certain other new applications of known plastic substances. (*Covering bricks with "opaline."*)	7	1st Jan. 1853	Joseph Brough.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BRICKS, &c.—*continued.*			
Manufacturing of bricks, pipes, tiles, imitation stone, and peat bricks for fuel, by means of a machine and arrangements of machinery titled "A central, circular, and horizontal motion."	94	13th Jan. 1853	Edward Wills Uren.
Preparing plastic materials to be used in the manufacture of fired wares and other purposes. (*For building.*)	197	26th Jan. 1853	Nicolas Francisque Ador.
Improved brick	222	29th Jan. 1853	Henry Avins. George Tarplee.
Manufacture of bricks and tiles	278	2nd Feb. 1853	William Gregory.
Application of granite and similar substances to ornamenting purposes and to the construction of buildings. (*Making bricks.*)	333	7th Feb. 1853	John Londe Tabberner.
Manufacture of tiles for roofing	383	14th Feb. 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of bricks, tiles, and drain pipes or tubes	450	22nd Feb. 1853	James Hudson. Thomas Bamford Hudson.
Moulds for the manufacture of bricks	583	8th March 1853	Charles Baker.
Manufacture of bricks and tiles	586	8th March 1853	Alexander Samuelson.
Drying bricks and such other articles as are or may be made of clay	649	16th March 1853	George Knight. John Heritage.
Improvements in building materials	1001	26th April 1853	John Pym.
Improvements in ventilating bricks	1090	4th May 1853	John Houseman Hutchinson.
Mode of constructing dwelling-houses or other buildings; peculiar shaped bricks and tiles to be used for the purpose.	1134	9th May 1853	Edward Blackett Beaumont.
Manufacture of pipes, tiles, bricks, and slabs from clay.	1167	11th May 1853	Edmund Whitaker.
Bricks or tiles	1378	4th June 1853	Edward Blackett Beaumont.
Manufacture of bricks	1524	22nd June 1853	William Geeves.
Moulding, forming, and compressing clay for the manufacture of bricks, tiles, and other earthenware	1583	1st July 1853	Richard Bradley. William Craven.
Manufacture of bricks and other articles from plastic materials.	1657	12th July 1853	Martin Samuelson.
Manufacture of bricks	1679	14th July 1853	Benjamin Looker, junior.
Manufacture of tiles and stairs from plastic materials	1718	20th July 1853	James Shield Norton. Henry Jules Borie.
Manufacture of tiles for roofing	1766	27th July 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of bricks	1797	1st Aug. 1853	Charles May.
Machinery for tempering clay and pressing or converting it into bricks.	1814	3rd Aug. 1853	Charles Frederick Stansbury.
Machinery or apparatus for manufacturing bricks	1833	5th Aug. 1853	William Garforth. James Garforth.
An improved tile; method of making tiles	1834	5th Aug. 1853	Robert Hunt.
Combination or combinations of materials suitable for buildings and other structures and parts thereof; machinery for producing the same.	1888	12th Aug. 1853	William Littell Tizard.
Manufacture of bricks, pipes, tiles, covings, and such other articles as are or may be moulded in clay.	1921	17th Aug. 1853	John Heritage.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BRICKS, &c.—*continued.*			
Machinery for the manufacture of bricks, tiles, pipes, and pottery.	1926	17th Aug. 1853	Thomas Grimsley.
Manufacture of blocks of plastic materials for building purposes.	1977	25th Aug. 1853	William Austin.
Application of the slags or refuse matters obtained during the manufacture of metals. (*Forming building blocks.*)	1995	27th Aug. 1853	George Robinson.
Manufacture of bricks - - - - -	2060	7th Sept. 1853	Weston Grimshaw. Ellis Rowland.
Compositions applicable to the manufacture of bricks, tiles, and other moulded articles - -	2062	7th Sept. 1853	Benjamin Hustwayte. Richard John Paul Gibson.
Manufacture of bricks, tiles, and blocks - -	2150	15th Sept. 1853	John Barsham.
Manufacture of bricks, tiles, and blocks - -	2221	28th Sept. 1853	John Barsham.
Manufacture of bricks - - - - -	2267	4th Oct. 1853	Nevil Smart.
Manufacture of bricks - - - - -	2288	6th Oct. 1853	William Geeves.
Manufacture of bricks and tiles - - -	2312	8th Oct. 1853	Henry Clayton.
Moulding of bricks and other articles of like materials.	2336	11th Oct. 1853	John Francis Porter.
Manufacture of bricks and tubes or tiles - -	2591	8th Nov. 1853	Humphrey Chamberlain.
Manufacture of tiles and tubes - - -	2691	19th Nov. 1853	William Austin.
Manufacture of bricks - - - - -	2739	24th Nov. 1853	William Jones.
Machinery or apparatus for making bricks and other articles from clay and other plastic materials.	2904	14th Dec. 1853	William Beckett Johnson.
Construction of certain machinery and apparatus for the manufacture of bricks and tiles.	2969	21st Dec. 1853	Thomas Vincent Lee.
Manufacturing liquid quartz or silex to be used in the manufacture of certain compositions for ornamental and useful purposes. (*Used in making stone for building.*)	2991	24th Dec. 1853	Harris Hardinge.
Machinery for moulding bricks and other articles of brick earth.	3014	29th Dec. 1853	Henry Jackson.
BRIDGES, VIADUCTS, PONTOONS.			
Combining metal plates for ship-building and other engineering constructions. (*Bridges.*)	235	29th Jan. 1853	Henry Batchelor.
Construction of collapsible framework of wood or iron, which may be employed for forming portable bridges and other similar structures which may occasionally be required to be removed from place to place with facility, economy, and despatch.	241	29th Jan. 1853	Jean Baptiste Lavanchy.
Mode of constructing certain works applicable to aqueducts, viaducts, submarine foundations, and other useful purposes.	247	31st Jan. 1853	Samuel Perkes.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*Facings of bridges and arches.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BRIDGES, &c.—*continued.*			
Portable bridges, rafts, or pontoons	1597	4th July 1853	George Frederick Parratt.
Improvements in iron bridges	1613	6th July 1853	Thomas William Kennard.
Construction of bridges, viaducts, and other like structures.	1816	3rd Aug. 1853	John Macintosh.
Construction of suspension-bridges	1871	11th Aug. 1853	Henry Palfrey Stephenson.
Construction of viaducts, bridges, lintels, beams, girders, and other horizontal structures and supports.	1940	19th Aug. 1853	Frederick William Alexander de Fabeck.
Construction of metallic bridges and other similar structures	2818	3rd Dec. 1853	Henry Jeremiah Iliffe. James Newman.
Girders, bridges, roofs, and other such like structures.	2983	23rd Dec. 1853	John Britten.
BRUSHES AND COMBS; CURRY COMBS.			
Brooms or brushing apparatus	107	15th Jan. 1853	James Haddon Young.
Improvements in brushes	916	14th April 1853	George Titterton.
Apparatus for cleansing the interior of tubular boilers and other hollow articles. (*Brush.*)	943	19th April 1853	Frederick Henry Smith.
Duster or dusting-brush, painting-brush, and all other description of brushes the handle of which passes through the centre, and the hair or bristles are bound or tied round it.	1225	18th May 1853	Charles Clarkson.
Mode of manufacturing metallic handles for knives and forks, backs for razors, bows for scissors, and the relative parts of such like instruments.	1428	13th June 1853	William Smith.
Improvements in spring or clasp knives;—applicable to such other articles as shut or close after the manner of clasp knives. (*Combs.*)	1535	24th June 1853	Joseph Rock.
Manufacture of brushes and substitutes for bristles	1690	15th July 1853	Charles Goodyear.
Shaving-brush;—"The Traveller's Patent Shaving-brush."	1735	23rd July 1853	Charles William Manby.
Desks, work-boxes, dressing-cases, tea-caddies, and similar articles; arrangements and fittings thereof.	1859	10th Aug. 1853	John George Taylor.
Tooth, nail, and hair brushes	2068	8th Sept. 1853	James Coate.
Mode of manufacturing brushes; machinery for applying the same to the purposes of polishing and cleaning	2165	17th Sept. 1853	Richard Litherland. Thomas Picton.
Apparatus for applying paint, varnish, and other liquid substances; cleaning carriages, ships, roadways, houses, and other buildings.	2344	12th Oct. 1853	Robert William Waithman.
Mechanical application of brushes	2368	14th Oct. 1853	Mary Ann Davy. Ann Taylor.
Certain applications of vulcanized india-rubber (*For making brushes and curry combs.*) (*Communicated by Charles Eugène François Guibal.*)	2799	1st Dec. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BUILDING AND TENT-MAKING; SCAFFOLDING.			
A new composition of different metals or metallic substances. (*For roofing.*)	35	6th Jan. 1853	Edme Augustin Chameroy.
Construction of bearings or steps for shafts, turntables, or moveable platforms;—"Parry's improvements."	39	6th Jan. 1853	William Edward Newton.
Ornamenting walls, ceilings, and other surfaces - (*As balustrades.*)	144	20th Jan. 1853	William Riddle.
Application of a new material to the construction of portable houses and other buildings. (*Zinc for side walls and roofs.*)	153	21st Jan. 1853	James Middlemas.
Improvements applicable to the construction of temporary dwellings.	202	26th Jan. 1853	William Henry Moore.
Construction of collapsible framework of wood or iron, which may be employed for forming portable houses, parts of houses, and other similar structures, which may occasionally be required to be removed from place to place with facility, economy, and despatch.	241	29th Jan. 1853	Jean Baptiste Lavanchy.
Mode of constructing certain works applicable to submarine foundations and other useful purposes. (*As roofs; also bearers for buildings.*)	247	31st Jan. 1853	Samuel Perkes.
Giving elasticity to certain structures and parts thereof. (*Walls of buildings; beds for iron girders; fortifications.*)	270	1st Feb. 1853	Thomas Charles Clarkson.
Appplication of granite and similar substances to ornamenting purposes and to the construction of buildings.	333	7th Feb. 1853	John Londe Tabberner.
Iron structures - - - - - (*Columns, rafters, gutters.*)	609	10th March 1853	Edward Taylor Bellhouse.
Mode of connecting sheets of corrugated iron when used in the construction of roofs, iron houses, and other purposes.	697	22nd March 1853	Edwin Maw.
Method of constructing the walls of houses, hothouses, and other buildings;—also applicable to the construction of fences.	759	30th March 1853	Martin Billing.
Emigrants' habitation cart - - -	790	2nd April 1853	Albion Richard Snelling.
Construction of metallic beams or bracings and metallic sheets or plates, applicable to the building of ships and other structures where lightness and strength are required.	827	6th April 1853	William Radford.
Floors and other like surfaces - - -	1034	28th April 1853	Sir John Scott Lillie.
Flooring cramp and lifting jack - - -	1055	30th April 1853	John Smith.
Construction of buildings - -	1111	5th May 1853	William Buckwell.
Mode of constructing dwelling-houses or other buildings; peculiar shaped bricks and tiles to be used for the purpose.	1134	9th May 1853	Edward Blackett Beaumont.
Construction of portable houses or portions thereof out of parts which may be used for other purposes.	1145	10th May 1853	Gregory Kane.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BUILDING, &c.—*continued.*			
Improvements in portable houses	1159	11th May 1853	Henry Potter Burt.
Manufacture of covering materials for houses and other structures and surfaces.	1238	19th May 1853	Thomas Grahame.
Construction of portable houses; machinery for raising, moving, and lowering the same.	1352	2nd June 1853	William Thorold.
Application of slate for building purposes	1385	4th June 1853	Thomas Richbell.
Portable houses and buildings	1403	8th June 1853	George Tillett.
Manufacture of sheet iron and iron plates used for buildings and other like purposes.	1449	15th June 1853	Charles Wye Williams.
Application and combination of glass, porcelain, stoneware, earthenware, terra-cotta, composition in plaster called scagliola and majolica ware.	1480	17th June 1853	James Hogg.
Formation of such metallic plates as are required to be conjoined by rivetting or other suitable fastening. (*For building houses.*)	1529	23rd June 1853	James Burrows.
Improvements in scaffoldings, ladders, &c., which scaffoldings and ladders are used as carriages.	1599	4th July 1853	Marcus Davis.
Manufacture of tiles and stairs from plastic materials	1718	20th July 1853	James Shield Norton. Henry Jules Borie.
Depositing metals or alloys of metals (*Banisters, balconies, beams for roofing.*)	1777	29th July 1853	William Edward Newton.
Construction of tents	1783	30th July 1853	Patrick Ramsay.
Means or processes for preserving metals from corrosion. (*Roofing and railings.*)	1789	1st Aug. 1853	John Carvalho De Medeiros.
Manufacture of a composition resembling papier mâché and carton-pierre; partly applicable to the construction of roofing, &c. (*And wainscoting.*)	1804	2nd Aug. 1853	William Henry Clarke.
Roofing buildings	1818	3rd Aug. 1853	James Billings.
Fireproof structures	1832	5th Aug. 1853	Edward Taylor Bellhouse.
Combination of glass with iron or other metals to serve for the construction of floors, walls, roofs, or parts thereof, and for any purpose for which a translucent medium possessing great strength is desirable.	1840	6th Aug. 1853	Auguste Edouard Loradoux Bellford.
Combination or combinations of materials suitable for buildings and other structures and parts thereof; machinery for producing the same.	1888	12th Aug. 1853	William Littell Tizard.
Construction of lintels, beams, girders, and other horizontal structures and supports.	1940	19th Aug. 1853	Frederick William Alexander De Fabeck.
Application of the slags or refuse matters obtained during the manufacture of metals. (*Roofing.*)	1995	27th Aug. 1853	George Robinson.
Construction of iron houses, beams, and other like structures or articles.	2042	5th Sept. 1853	John Clare, junior.
Construction of portable houses and buildings	2116	3rd Dec. 1853	William Dray.
Mode of protecting iron of every kind against the action of the weather, of rain, river, spring, and sea water, so that iron thus protected may be used for roofing, for marine and various other purposes.	2215	27th Sept. 1853	Nicholas Callan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BUILDING, &c.—*continued.*			
Preparation of wood for sheathing ships, as a substitute for copper and other metals, also in house, ship and pier building.	2323	11th Oct. 1853	Henry Kemp.
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for roofing, &c.	2340	12th Oct. 1853	Nicholas Callan.
Apparatus for cleaning houses and other buildings -	2344	12th Oct. 1853	Robert William Waithman.
Improvements in emigrants' and other portable houses and erections; hinges of metal for all purposes requiring hinges.	2365	14th Oct. 1853	Samuel Bromhead.
Manufacture of bar and sheet metals; machinery connected therewith, and application of such metals to various useful purposes. (*For house building and beams.*)	2662	17th Nov. 1853	John Clare, junior.
Construction of portable houses - - -	2685	18th Nov. 1853	Henry Richard Cottam.
Construction of metallic bridges and other similar structures - - - - - (*Floors; girders.*)	2818	3rd Dec. 1853	Henry Jeremiah Iliffe. James Newman.
Improvement or addition to augment convenience by transformation and facility, the different lines required in the erection or manufacturing edifices or structures by apparatus, tools, or instruments suitable for the different capacities of operatives' and general surveying. (*Staircase.*)	2830	6th Dec. 1853	John Mold.
Formation of such metallic plates as are required to be conjoined by rivetting or other similar fastening. (*For construction of houses.*)	2962	20th Dec. 1853	James Burrows.
Girders, bridges, roofs, and other such like structures.	2983	23rd Dec. 1853	John Britten.
BUOYS AND FLOATS.			
Ocean floats which are designed to save lives and light treasures from shipwreck.	958	21st April 1853	Anthony Deale.
Construction of portable boats or vessels and buoys.	1450	15th June 1853	John Mackintosh.
Manufacture of bar and sheet metals; machinery connected therewith; application of such metals to various useful purposes. (*For buoys.*)	2662	17th Nov. 1853	John Clare, junior.
Mode of communicating from vessels to the shore, or from one vessel to another. (*Float or buoy.*)	2703	21st Nov. 1853	Robert Jamieson Sibbald.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BUTTONS, BUCKLES, AND OTHER DRESS-FASTENINGS.			
Manufacture of buttons	60	8th Jan. 1853	Richard Walker.
Fastening for brooches and other articles of jewellery and dress.	162	22nd Jan. 1853	Benjamin Quinton.
Mode of fastening buttons to garments; an improved button; machinery for manufacturing the same.	173	24th Jan. 1853	Benoit Perreyon.
An improved clasp or buckle	366	11th Feb. 1853	Antoine Sanguinède.
Swivel hooks and such like fasteners	375	12th Feb. 1853	George Lee Lysnar.
Ornamental fastenings for dress (*Pins.*)	462	25th Feb. 1853	John George Taylor.
An improvement in covered buttons	550	4th March 1853	Henry M^{c}Evoy.
Construction of buttons; mode of applying the same to gloves and other articles of dress.	589	8th March 1853	Thomas Glover.
Strap or band for connecting together certain parts of harness and saddlery;—applicable also to other purposes where straps or bands are used. (*Applicable to buckles for spurs, garters, braces, trousers, &c.*)	594	9th March 1853	Samuel Blackwell.
Fasteners for buttons	720	24th March 1853	George Isaac Jackson. Henry David Jackson.
Manufacture of paste and enamel buttons	899	14th April 1853	Constant Jouffroy Duméry.
Fastenings for articles of dress	939	19th April 1853	Thomas Newey.
Improvements in buttons	968	22nd April 1853	Thomas Freeman Finch.
Manufacture of covered buttons made by dies and pressure.	1086	4th May 1853	Cornelius Alfred Jaquin.
Buckles	1514	20th June 1853	Henry Blatin.
Fastenings for wearing-apparel	1607	5th July 1853	Thomas Newey.
Mode of fastening buttons to garments; an improved button; machinery for manufacturing the same.	1712	19th July 1853	Peter Armand le Comte de Fontainemoreau.
Depositing metals or alloys of metals	1777	29th July 1853	William Edward Newton.
Manufacture of buttons	2023	31st Aug. 1853	Henry Jeremiah Iliffe. James Newman.
Improvements in buttons—"Buffalo buttons"	2053	6th Sept. 1853	Thomas Pope. Edward Bufton.
Buttons or other such fastenings; applying or affixing them to wearing-apparel. (*For boots.*)	2059	7th Sept. 1853	William Joseph Smith.
Manufacture of buttons	2230	29th Sept. 1853	Henry Jeremiah Iliffe. James Newman. Henry Jenkins.
Gig-harness (*Buckles.*)	2236	30th Sept. 1853	James Willis.
Ornamental dress-fastenings	2330	11th Oct. 1853	Charles Rowley
Composition to be applied in substitution of bone and horn. (*For buttons and dress ornaments.*)	2407	19th Oct. 1853	Peter Armand le Comte de Fontainemoreau.
Improvements in buckles	2612	11th Nov. 1853	James Willis.
Construction of buckles	2669	17th Nov. 1853	Thomas Bourne.
Manufacture of perforated buttons	2683	18th Nov. 1853	Patrick Benignus O'Neill.
Buttons and other dress-fastenings;—partly applicable for other purposes.	2945	17th Dec. 1853	James Septimus Cockings.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CALTROPS.			
Caltrops for military purposes - - -	879	12th April 1853	Richard Greville Pigot.
CANDLES AND NIGHT-LIGHTS; TREATING FATTY AND OILY MATTERS.			
Deodorizing and preparing American and other resins for mixing with grease, tallows, and wax, so as to improve them by giving them a greater hardness and consistency, and rendering them less liable to be affected by change of temperature.	4	1st Jan. 1853	Junius St. John Eicke.
Treating fatty and oily matters - - -	19	4th Jan. 1853	George Gwynne. George Fergusson Wilson.
Separating the more fluid parts of fatty and oily matters.	71	11th Jan. 1853	Henry Constantine Jennings.
Candles; machinery or apparatus for making thereof.	271	1st Feb. 1853	Edwin Whele.
Manufacture of candles - - - - -	280	2nd Feb. 1853	Auguste Edouard Loradoux Bellford.
Treating animal matters; manufacturing manure -	349	9th Feb. 1853	John Webster.
Treating oils and other fatty matters - - -	360	10th Feb. 1853	George Hutchinson.
Treatment of oleaginous, fatty, or gelatinous substances for purifying, decolourizing, compounding, or clarifying the same.	377	12th Feb. 1853	William Pidding.
Mode of manufacturing wax or composition tapers; machinery or apparatus for that purpose.	474	25th Feb. 1853	John Hynam.
Apparatus for extracting liquid out of solid substances, specially applicable to the treatment of fatty matters.	691	21st March 1853	Jean Marie Durnerin.
Applying to illuminating the extract of bituminous products of coal, peat, and lignites; rectifying and depurating the essences and greasy matter from coal. (*Obtaining candle-wax.*)	770	31st March 1853	William Augustus Pascal Aymard.
Manufacture of night-lights and their cases - -	775	1st April 1853	George Fergusson Wilson. James Freeman Lee.
Treating certain oily matters; manufacture of oil -	776	1st April 1853	George Fergusson Wilson.
Treating certain greasy matters; manufacture of candles.	784	1st April 1853	George Fergusson Wilson.
Manufacture of night-lights; apparatus to be used therewith.	785	1st April 1853	George Fergusson Wilson.
Certain improvements in the preparation for and application to the manufacture of candles and other purposes, of certain fatty and resinous bodies or substances.	832	7th April 1853	William Augustus Pascal Aymard.
Apparatus for manufacturing moulded candles -	985	23rd April 1853	George Fergusson Wilson. William Henry Hatcher. John Jackson.
Treatment of certain saponaceous compounds obtained in the manufacture of soap - - (*Making candles.*)	1027	27th April 1853	Alfred George Anderson. John Barker Anderson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CANDLES, &c.—*continued.*			
Manufacture of candles	1124	6th May 1853	Francesco Capeccioni.
Treating fatty matters to render them suitable for the manufacture of candles.	1306	27th May 1853	Aristide Michel Servan.
Distillation of fatty and oily matters	1538	24th June 1853	John Webster.
Manufacture of candles and night-lights	1640	9th July 1853	Frederick Meyer.
Manufacture of candles	1651	11th July 1853	Felix Lieven Bauwens.
Manufacture of mould candles	1730	22nd July 1853	Alexander Isaac Austen.
Means of treating and preparing certain tar or naphtha, and applying products thereof.	1748	25th July 1853	Warren de la Rue.
Apparatus used in the manufacture of mould candles	1827	4th Aug. 1853	George Fergusson Wilson. Alexander Isaac Austen.
Treatment of fatty and oily matters to render them suitable for the manufacture of candles.	2099	10th Sept. 1853	John Webster.
Treating and bleaching resinous substances	2167	17th Sept. 1853	Henry Constantine Jennings.
Distilling fatty and oily matters	2179	20th Sept. 1853	Aristide Michel Servan.
Manufacture of candles and night-lights	2317	10th Oct. 1853	George Fergusson Wilson.
Process of obtaining fatty matters from products arising in the manufacture of glue and other gelatinous substances.	2384	15th Oct. 1853	Alexander M^{c}Dougall.
Treating fatty and oily matters to render them applicable for the manufacture of candles and night-lights.	2713	22nd Nov. 1853	Frederick Meyer.
Bleaching oils and fats (*For making candles.*)	2715	22nd Nov. 1853	Frederick Meyer.
Manufacture of liquid hydro-carbons and paraffine	2958	20th Dec. 1853	Paul Wagenmann.
CANDLE-WICK.			
Improvements in candle-wick	78	12th Jan. 1853	Nathaniel Card.
Application of a certain mineral to lamps, in lieu of cotton or other wicks (*Amianthus or asbestos.*)	936	18th April 1853	James Salter Scarlett. William Smallcombe Passmore.
Manufacture of wicks	1313	28th May 1853	Ebenezer Nash. Joseph Nash.
Improvements in lighting, for consuming the carbon escaping combustion in ordinary flames. (*Asbestos or hemp wicks.*)	2071	9th Sept. 1853	Peter Armand le Comte de Fontainemoreau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CARD AND ENVELOPE CASES.			
Mode of applying and combining ornamented glass in the manufacture of useful and ornamental articles. (*Card-baskets.*)	265	31st Jan. 1853	John Pinkerton.
Manufacture of boxes such as have been hitherto made of pasteboard.	1069	2nd May 1853	Joseph Thomas Wood.
An improvement in cases for holding cards -	2709	22nd Nov. 1853	Alexander Bain.
CARTRIDGES AND WADDING.			
Certain improvements in fire-arms - - - (*Cartridge.*)	212	28th Jan. 1853	William Tranter.
Application of explosive compounds - - (*As cartridges.*)	306	4th Feb. 1853	George Winiwater.
Manufacture of cartridges and wads or wadding for fire-arms.	1000	26th April 1853	John Coope Haddan.
Breech-loading fire-arms; cartridges for use with such arms.	1320	28th May 1853	William Walker Marston.
Manufacture of cartridges - - -	1376	4th June 1853	John James Kerr.
Improvements in cartridges - - -	1390	6th June 1853	Frederick Lott.
Guns and other fire-arms; manner of loading and discharging same; balls, cartridges, and explosive compounds.	1447	15th June 1853	Charles Evan Reeves.
Fire-arms; discharging the same - - -	2176	20th Sept. 1853	Robert Fletcher. John Smith.
Fire-arms and cartridges - - - -	2313	8th Oct. 1853	William Edward Newton.
Breech-loading fire-arms; cartridges for use with such arms. (*Communicated by William Walker Marston.*)	2690	19th Nov. 1853	Moses Poole.
Improvements in fire-arms - - -	2778	29th Nov. 1853	Auguste Edouard Loradoux Bellford.
Manufacture of cartridges and of wads or wadding for fire-arms.	2829	6th Dec. 1853	John Coope Haddan.
Certain improvements in fire-arms; bullets and waddings to be used therewith.	2921	16th Dec. 1853	William Tranter.
CASKS AND BARRELS.			
Machinery for the manufacture of casks, barrels, and other similar vessels.	476	25th Feb. 1853	John Grist.
Manufacturing casks, vats, and other like vessels; machinery or apparatus to be employed for such purpose - - - - -	636	14th March 1853	Bennett Alfred Burton. Henry Mortimer Burton.
Machinery for the manufacture of casks, barrels, and other similar vessels.	834	7th April 1853	John Grist.
Manufacture of metallic casks and vessels - -	903	14th April 1853	William Laycock.
Manufacture of casks or wooden vessels - -	1401	7th June 1853	Robert Bouty Cousens.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CASKS, &c.—*continued.*			
Construction of casks and other vessels	1985	27th Aug. 1853	Richard Roberts.
Machinery for making barrels and other casks	2021	31st Aug. 1853	William Edward Newton.
Stave jointing or shaping machine	2092	10th Sept. 1853	John Grist.
Machinery for the manufacture of casks and barrels	2183	20th Sept. 1853	Stephen Neale. William Blanchard Jerrold. Conrad Montgomery.
Casks and machinery or apparatus for the manufacture of casks	2555	3rd Nov 1853	George Duncan. John Boyd. John Barker.
Means of holding staves while being cut (*For making casks.*)	2613	11th Nov. 1853	Richard Dryburch.
Manufacture of casks	2627	12th Nov. 1853	William Austin.
Manufacture of bar and sheet metals; machinery connected therewith;—application of such metals to various useful purposes. (*For casks.*)	2662	17th Nov. 1853	John Clare, junior.
Preparing wood to be employed in the manufacture of casks and other vessels for containing liquids.	2724	23rd Nov. 1853	Joseph Amos.
Metallic casks and other vessels	2804	2nd Dec. 1853	Alexander Brown.
CASTING AND MOULDING (*Metals, also Plastic Materials*); **MAKING MOULDINGS.**			
Manufacture of ornaments for lamps, chandeliers, and architectural purposes. (*Rosettes for ceilings; mouldings for rooms.*)	10	3rd Jan. 1853	David Hulett.
Construction of centrifugal pumps (*Casting.*)	14	3rd Jan. 1853	Charles Edwards Amos.
Machinery for shaping metals (*For mouldings.*)	82	12th Jan. 1853	John Arrowsmith.
Projectile (*Casting balls.*)	86	12th Jan. 1853	Edward Haslewood.
Manufacture of tubes; application of tubes to certain purposes	110	17th Jan. 1853	Thomas Potts. James Septimus Cockings.
Manufacture of blocks for printing music (*Moulding.*)	115	17th Jan. 1853	Auguste Edouard Loradoux Bellford.
Manufacture of hoops and tires for railway wheels and other purposes.	138	20th Jan. 1853	Peter Rothwell Jackson.
Preparing plastic materials to be used in the manufacture of fired wares and other purposes. (*Moulding vases.*)	197	26th Jan. 1853	Nicolas Francisque Ador.
Blades of table-knives	205	27th Jan. 1853	Edward Brown.
Manufacture of spoons and forks and other similar articles for domestic use.	401	16th Feb. 1853	Job Cutler.
Manufacture of chandeliers, gas-brackets, and lamp-frames	440	21st Feb. 1853	Joseph Ramage. Thomas Coffey.
Manufacture of certain parts of machinery to be used in preparing and spinning cotton and other fibrous materials.	473	25th Feb. 1853	Francis Preston.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CASTING, &c.—*continued.*			
Apparatus called "pressers" employed in the preparation of cotton and other fibrous materials for spinning. (*Casting flyers.*)	551	4th March 1853	George William Bott.
Manufacture of tubes and mandrils - -	718	24th March 1853	William Keates.
Manufacture of knives and forks - - - (*Bolsters and handles.*)	756	29th March 1853	George Shaw.
Machinery for manufacturing and rolling iron - (*Casting rolls.*)	804	4th April 1853	Charles May.
Metallic handles for table cutlery, daggers, and such like instruments - - - -	870	12th April 1853	Samuel Russell. Robert Murray M'Turk.
Welding cast steel with iron, steel, cast iron, and other metals.	880	12th April 1853	François Felix Verdié.
Manufacture of paste and enamel buttons - - (*Moulding.*)	899	14th April 1853	Constant Jouffroy Dumèry.
Construction and manufacture of door-bolts - (*Casting and moulding plates.*)	953	20th April 1853	Henry M'Evoy.
Construction of railways - - - - (*Rails and points.*)	962	21st April 1853	Henry Carr.
Casting metals and moulding or forming other materials.	995	25th April 1853	Julian Bernard.
Manufacture of wads or wadding for fire-arms - (*Making in moulds.*)	1000	26th April 1853	John Coope Haddan.
Manufacture of porcelain and like wares - - (*Moulding.*)	1004	26th April 1853	Moses Poole.
Constructing and applying models or patterns for moulding preparatory to casting iron, brass, and other metals for various purposes - -	1010	27th April 1853	John Hetherington. John Dugdale. Edward Dugdale.
Manufacture of cases for jewellery, for optical and other instruments, miniatures, and other articles.	1075	3rd May 1853	Richard Quin.
Treatment or manufacture of peat and other substances to be used as fuel. (*Compressing, applicable for moulding ornaments.*)	1117	6th May 1853	James Egleson Anderson Gwynne.
Moulding or shaping metals - - -	1136	9th May 1853	David Law. John Inglis.
Manufacture of carriage wheels - - - (*Casting.*)	1146	10th May 1853	Octavius Henry Smith. Youngs, Parfrey.
Kitchen-ranges or fire-grates - - -	1224	18th May 1853	Wharton Rye.
Manufacture of soles for boots, shoes, and other coverings for the feet.	1360	2nd June 1853	William Edward Newton.
Mode of manufacturing metallic handles for knives and forks, backs for razors, bows for scissors, and the relative parts of such like instruments.	1428	13th June 1853	William Smith.
Manufacture of handles for knives and other similar articles.	1507	20th June 1853	William Edward Newton.
Machinery or apparatus for preparing and spinning cotton and other fibrous materials - - (*Casting bearings.*)	1555	27th June 1853	John Mason. Luke Ryder.
Manufacture of printing-rollers - - - (*Casting.*)	1632	8th July 1853	Moses Poole.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CASTING, &c.—*continued.*			
Manufacture of certain drawing or mathematical instruments; also packing or fitting the same in their cases;—also applicable to the packing or fitting of other articles (*Casting.*)	1634	9th July 1853	James Parkes. Samuel Hickling Parkes.
Moulds for steel castings	1637	9th July 1853	Ewald Riepe.
Mode of fastening buttons to garments; an improved button; machinery for manufacturing the same.	1712	19th July 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of mould candles	1730	22nd July 1853	Alexander Isaac Austen.
Producing castings in malleable iron	1887	12th Aug. 1853	Richard Archibald Brooman.
Axle-box for railway carriages and waggons	1952	22nd Aug. 1853	John Steven.
Application of the slags or refuse matters obtained during the manufacture of metals.	1995	27th Aug. 1853	George Robinson.
Moulding or shaping metals	2058	7th Sept. 1853	David Law. John Inglis.
Manufacture of printing blocks and cylinders (*Forming moulds.*)	2110	12th Sept. 1853	Alfred Vincent Newton.
Permanent way of railways (*Sleepers.*)	2138	14th Sept. 1853	Thomas Swingler.
Improvements in shears	2178	20th Sept. 1853	John Louis Beloud. Samuel Camile Beloud. George Guyatt.
Improvements in lathes	2204	24th Sept. 1853	Alexander Dalgety.
Coupling pipes and other articles; apparatus connected therewith. (*Moulds for casting joint rings.*)	2242	1st Oct. 1853	Charles Coates.
Machinery for manufacturing hoops and wheels (*Moulding cog-wheels.*)	2261	4th Oct. 1853	Peter Rothwell Jackson.
Joining the ends of railways	2311	8th Oct. 1853	Charles May. James Samuel.
Improvements in fire-arms	2409	19th Oct. 1853	John Norton.
Improvements in casting	2450	24th Oct. 1853	James Denoon Young.
Machinery or apparatus for removing patterns from moulds for castings.	2641	14th Nov. 1853	Charles de Bergue.
Improvements in moulding, more particularly applicable to toothed wheels. (*Communicated by Monsieur de Louvrié.*)	2880	10th Dec. 1853	John Henry Johnson.

For moulding Clay—*see* "EARTHENWARE." "BRICKS." "PIPES."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CEMENTING DEVICES, BRONZE, &c. ON TO FABRICS ABD YARNS, ALSO INSERTING STUDS OR FILAMENTS; MAKING CEMENTED GOODS.			
Treating sheets of caoutchouc or gutta-percha so as to render the same fit for ornamental coverings. (*Inserting studs, &c. in perforated devices; forming pile by means of cemented threads or spun glass.*)	598	9th March 1853	William Pidding.
Manufacture of woven textile or other fabrics; machinery or apparatus connected therewith. (*Inserting studs, &c. in perforations.*)	817	5th April 1853	William Pidding.
Treatment of twine or other threads, or cuttings of paper or other waste, for the production of useful and ornamental articles. (*Inserting threads or cuttings in perforations.*)	821	5th April 1853	William Pidding.
Producing ornamental glass surfaces - - (*Cementing printed paper to the under side.*)	858	9th April 1853	Adolphe Marius Alexandre Iglesia.
Combination of materials suitable for the manufacture of boxes, cases, trays, and other like articles. (*Cardboard with tin-foil cemented thereon.*)	1022	27th April 1853	Wellington Williams.
Mode of ornamenting stuffs and paper - - (*Cementing designs thereon.*)	1492	18th June 1853	William Armand Gilbee.
Printing or producing designs and patterns on stuffs and fabrics. (*And adhering coloured powders or flocks.*)	1553	27th June 1853	Richard Archibald Brooman.
Manufacture of beds, seats, and other hollow flexible articles to contain air. (*Made cellular by cementing at intervals.*)	1695	15th July 1853	Charles Goodyear.
Manufacture of materials to render them suitable as substitutes for millboard and such like uses. (*Wood cemented to paper.*)	2063	9th Sept. 1853	James Childs.
Manufacture of purses, cigar-cases, reticules, bags, tobacco-pouches, and other similar articles. (*Of silk and cotton cemented.*)	2146	15th Sept. 1853	Ludwig Frederick Herman Christoph Knuth.
Manufacture of fabrics made of silk, cotton-wool, flax, hemp, straw, grasses, fibres, mohair and other hair, spun-glass, and enamelled, glazed, or plain wire; application of some of those materials; machinery or apparatus connected therewith. (*Cemented goods.*)	2602	10th Nov. 1853	William Pidding.
Bands for binding more effectually than heretofore packets or parcels of lace and other articles. (*Linen, &c. adhered to paper.*)	2726	23rd Nov. 1853	James Dilks.
Ornamenting woven fabrics and other surfaces. (*Adhering gold leaf, bronze, &c.*)	2746	25th Nov. 1853	Alexander Drew.
Combining gelatine with certain other substances, and colouring the same, so as to produce various objects capable of resisting atmospheric influences. (*Adhering a plate of gelatine between two plates of glass.*)	2762	26th Nov. 1853	Louis Cornides.
Certain applications of vulcanized india-rubber - (*For making cloth by cementation.*) (*Communicated by Charles Eugène François Guibal.*)	2799	1st Dec. 1853	John Henry Johnson.
Manufacture of elastic fabrics - - - (*Silk yarns coated with india-rubber cement.*)	2940	17th Dec. 1853	Caleb Bedells.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CEMENTS; PLASTER OF PARIS; LIME.			
An improved cement for the resistance of fire -	40	6th Jan. 1853	William Beales.
Manufacture of buttons - - - - -	60	8th Jan. 1853	Richard Walker.
Preparation or manufacture of gypsum or plaster of Paris.	90	13th Jan. 1853	Moses Cartwright.
Cement for resisting moisture and damp - -	190	25th Jan. 1853	Joseph Wiggins.
Mode of smelting iron and other ores; manufacture of lime.	332	7th Feb. 1853	John Londe Tabberner.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*Plaster, mortar, or cement.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
Cement for closing steam or other joints - -	336	8th Feb. 1853	Thomas Howarth.
Paving and covering places - - - (*Using a cement.*)	567	7th March 1853	Jacques François Dupont de Bussac.
Certain new combinations of gutta-percha with other materials; method of applying such for use.	906	14th April 1853	John Wallace Duncan.
Obtaining liquid cement and pigments or paints -	1169	11th May 1853	George Bell.
Charring peat and other vegetable substances; burning lime.	1229	18th May 1853	John Barsham.
Plastic compound applicable to various ornamental and useful purposes.	1260	21st May 1853	Henri Joseph Scoutetten.
Compounds which may be employed for mouldings, frames, and many purposes to which plaster and other like substances are applicable.	1885	12th Aug. 1853	Richard Archibald Brooman.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Burning lime.*) (*Communicated by Monsieur Guillaume Louis Edouard Buras.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Tooth, nail, and hair brushes - - - (*Cement for filling the grooves.*)	2068	8th Sept. 1853	James Coate.
Manufacture of lime - - - - -	2096	10th Sept. 1853	Charles Jacob.
Apparatus for the manufacture or production of sulphuric acid - - - - - - (*Sulphur cement.*)	2803	2nd Dec. 1853	Henry Deacon. Edmond Leyland.
Manufacture of cement - - - -	2900	14th Dec. 1853	Benjamin Fullwood.
CHAINS; CHAIN-CABLES.			
Improvements in cables - - - - (*Chain-cables.*)	221	28th Jan. 1853	Richard Archibald Brooman.
Cutting out and piercing metals - - -	897	13th April 1853	Thomas Lovell Preston.
Constructing and applying connecting rods - (*To form chains.*)	2975	22nd Dec. 1853	Peter Armand le Comte de Fontainemoreau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CHIMNEY-PIECES.			
Making a tesselated pavement (*Applicable for mantel-pieces.*)	8	1st Jan. 1853	John Addison. Henry S. Eicke.
Mantel or chimney pieces	427	18th Feb. 1853	Charles Kinder.
Producing ornamental glass surfaces	858	9th April 1853	Adolphe Marius Alexandre Iglesia.
Manufacture of articles of marble	1188	13th May 1853	John Knowles. Edward Taylor Bellhouse.
Application of the slags or refuse matters obtained during the manufacture of metals. (*Chimney-pieces.*)	1995	27th Aug. 1853	George Robinson.
Application of sulphate of lime to the fabrication of mosaics and incrustations, and for any new processes of colouration of certain varieties of this substance. (*Facing chimney-pieces.*)	2030	2nd Sept. 1853	Barthélemy Auric.
Improvements in mantel-pieces	2309	8th Oct. 1853	William Potts.
Fireplaces, grates, or furnaces (*Chimney-pieces, &c.*)	2495	28th Oct. 1853	Malcolm Maclaren.
CHLORINE AND CHLORIDES.			
Apparatus for refrigerating (*Precipitating chloride of sodium.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Manufacturing chlorine; obtaining certain salts and other useful products from the residual matters of such manufacture.	1319	28th May 1853	Christopher Binks.
Apparatus for manufacturing chlorine or chlorides	1359	2nd June 1853	William Boyd.
Production of chlorine; manufacture of black oxyde of manganese.	1470	16th June 1853	Robert Mortimer Glover.
Manufacture of chlorine, &c.	1647	11th July 1853	William Cormack.
CHURNING; MAKING BUTTER AND CHEESE			
Improvements in churns	298	3rd Feb. 1853	James Greenhalgh.
A double-action vertical lever-churn	314	4th Feb. 1853	Alfred Woodward.
Machines for manufacturing butter, to be called "A. Willard's Butter-machine."	461	23rd Feb. 1853	Asa Willard.
Churns	600	9th March 1853	Theophilus John Nash.
Apparatus for freezing, cooling, and churning	1089	4th May 1853	Thomas Masters.
Construction of churns for producing butter	1509	20th June 1853	Richard Cornelius.
Manufacture or production of cheese	1728	21st July 1853	Edward Cockey. Henry Cockey. Francis Christopher Cockey.
Construction of churns; — applicable to other agitating or stirring apparatus.	2226	28th Sept. 1853	Thomas Askie.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CIGARS AND FUSEES; CIGAR-CASES.			
Drying cigars - - - - - -	503	28th Feb. 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of cigar-cases, tobacco-pouches, and other similar articles.	2146	15th Sept. 1853	Ludwig Frederick Herman Christoph Knuth.
An improved cigar-light - - - -	2795	1st Dec. 1853	Alfred Isaac Jones.
CISTERNS AND WATER-TANKS.			
A new composition of different metals or metallic substances. (*For making tanks.*)	35	6th Jan. 1853	Edme Augustin Chameroy.
Combining metal plates for shipbuilding and other engineering constructions. (*Tanks.*)	235	29th Jan. 1853	Henry Batchelor.
Mode of constructing certain works applicable to reservoirs and other useful purposes.	247	31st Jan. 1853	Samuel Perkes.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*For lining tubs and reservoirs.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
Manufacture of metallic casks and vessels - -	903	14th April 1853	William Laycock.
Improvements in flushing-apparatus and in water-closets.	904	14th April 1853	Joseph Adamson.
Arrangement of valves for the supply of water to and from cisterns and other receptacles; a new float valve.	1050	30th April 1853	Charles Adams.
Construction of coupling-joint, applicable to pipes, vessels of capacity, and other like uses.	1420	10th June 1853	Samuel Frankham.
Formation of such metallic plates as are required to be conjoined by rivetting or other suitable fastening.	1529	23rd June 1853	James Burrows.
Supplying ships or other vessels with water, air, or ballast. (*Waterproof bags.*)	1808	2nd Aug. 1853	Matthias Edward Boura.
Mode of protecting iron of every kind against the action of the weather, of rain, river, spring, and sea water, so that iron thus protected may be used for cisterns and various other purposes.	2215	27th Sept. 1853	Nicholas Callan.
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for cisterns, &c.	2340	12th Oct. 1853	Nicholas Callan.
Formation of such metallic plates as are required to be conjoined by rivetting or other similar fastening.	2962	20th Dec. 1853	James Burrows.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CLOCKS, WATCHES, DIALS, CASES, &c.			
Method of lettering, figuring, and ornamenting the surface of enamel used for dials and other purposes.	26	5th Jan. 1853	Francis Edwards.
An illuminated night-clock	151	21st Jan. 1853	Abraham Anton Meijsenheijm Knipschaar.
Improvements applicable to clocks and other time-keepers, for the purpose of indicating not only the time of the day, but the day of the week, the month, and the year—"Hawe's calendar clock or time-piece."	154	21st Jan. 1853	William Edward Newton.
Indicating time	199	26th Jan. 1853	Charles Nolet.
Improvements in time-keepers	263	31st Jan. 1853	Samuel Boreham.
Manufacture of dials applicable to telegraphic instruments, chronometers, barometers, sextants, quadrants, compasses, clocks, watches, and other time-pieces.	284	2nd Feb. 1853	John Smeeton.
Illuminating-apparatus; production of light (*Using clockwork in lamps for moving the body on which the flame impinges.*)	570	7th March 1853	Joseph John William Watson.
Producing plates or surfaces which may be used as dial or number plates, or other surfaces bearing inscriptions or devices of various kinds.	796	4th April 1853	William Edward Newton.
Apparatus for measuring and indicating a given period of time.	840	7th April 1853	Frederick le Mesurier.
Manufacture of watches and watch-cases; tools and apparatus employed therein.	1140	9th May 1853	Thomas Quaife.
Manufacture of watch-cases	1199	14th May 1853	John O'Keefe.
Clocks or time-keepers	1231	18th May 1853	George Sant.
Horological alarm	1457	15th June 1853	Timoléon Zoé Laus Maurel.
An instrument or apparatus termed "A solar watch." (*A portable sun-dial.*) (*Communicated by Philipe Henri Matthey Doret.*)	1551	25th June 1853	Alfred Sandoz.
Clock escapements	1769	28th July 1853	Charles Cummins.
Manufacture of tablets and dial-plates applicable to showing the distances of carriages travelling, barometers, compasses, and time-pieces.	1788	1st Aug. 1853	John Smeeton.
Carriage clocks	2018	31st Aug. 1853	Grignon Mennier.
Clocks or time-keepers, and parts connected therewith.	2036	3rd Sept. 1853	Ebenezer Dobell.
Clocks or time-keepers	2072	9th Sept. 1853	Jonas Radford.
Measuring and indicating time	2478	26th Oct. 1853	Uriah Lane.
Improvements in galvanic batteries (*Working clocks.*)	2486	27th Oct. 1853	George Edward Dering.
COACH-BREAKS.			
Apparatus for skidding or stopping wheels of carriages and other vehicles	451	22nd Feb. 1853	Pierre Frederick Gougy. David Combe.
Applying skids or drags to omnibuses	478	25th Feb. 1853	John Palmer de la Fons.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COACH-BREAKS—*continued.*			
Unhooking horses and impeding or stopping vehicles on common roads - - - - -	644	15th March 1853	Pierre Sigisbert l'Henault. Jean Richard.
Breaks or drags for wheeled carriages; adapting the carriages for the application and use of such breaks.	1144	10th May 1853	Thomas Murray.
Stopping and starting vehicles - - -	1720	20th July 1853	Philippe Poirier de St. Charles.
Apparatus for retarding and stopping railway-trains; — applicable to vehicles travelling on common roads - - - - - -	1757	26th July 1853	Thomas Banks. Henry Banks.
Apparatus applicable to carriages on common roads, for prevention of accidents and increasing the power of locomotion.	2325	11th Oct. 1853	Louis Alexandre Farjon Demoulin.
Apparatus for retarding or stopping the progress of wheel carriages.	2815	3rd Dec. 1853	Charles Buck.
Railway-breaks - - - - - - (*Also applicable to common road carriages.*)	2990	24th Dec. 1853	Joshua Margerison.
COACHES, HEARSES, CARTS, WHEELBARROWS, AND RAILWAY-CARRIAGES; CARRIAGE FURNITURE; CLEANING CARRIAGES.			
Improvements partly applicable to the construction of carriages for common roads.	53	8th Jan. 1853	Robert Lovely.
An improved bedstead which may be used as a vehicle.	269	1st Feb. 1853	Eliezer Edwards.
Apparatus to prevent the throwing up of mud by the wheels of vehicles.	291	3rd Feb. 1853	Manoah Bower.
Railway-carriages - - - - - -	310	4th Feb. 1853	Jacob Vale Asbury.
Carriages used on railways - - - - -	327	5th Feb. 1853	Edward Palmer.
Trucks, waggons, or vehicles for railway purposes -	498	28th Feb. 1853	James Murphy.
Railway-carriages; connecting and disconnecting the same.	499	28th Feb. 1853	Thomas Edward Merritt.
Improvements in carriages - - -	568	7th March 1853	Godfrey Simon. Thomas Humphreys.
Strap or band for connecting together certain parts of harness and saddlery, applicable also to other purposes where straps or bands are used. (*Check braces of carriages; luggage straps.*)	594	9th March 1853	Samuel Blackwell.
Improvements in chests for the use of emigrants, whereby they are also made applicable to other purposes. (*As wheelbarrows.*)	635	14th March 1853	John O'Leary.
Improvements in carriages - - - - (*For railways.*)	727	26th March 1853	Alexander Prince.
Improvements in railway-carriages - - -	729	26th March 1853	Charles de Bergue.
Improvements in railway-waggons - -	747	29th March 1853	Henry Lee Corlett.
Railway-carriages - - - - - -	758	29th March 1853	John Coope Haddan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COACHES, &c.—*continued.*			
Emigrants' habitation cart	790	2nd April 1853	Albion Richard Snelling.
Mode of suspending carriage bodies	883	12th April 1853	John Smith.
Construction of wheeled carriages	930	18th April 1853	James Begbie.
Machinery for bending wood or other materials (*Carriage shafts.*)	967	21st April 1853	William Edward Newton.
Improved wheelbarrow	979	23rd April 1853	Frederick John Wilson.
Construction of gigs, dog-carts, and other vehicles	993	25th April 1853	James Emery.
Construction of certain kinds of vehicles	1030	28th April 1853	Edward Bird.
Construction of carriages; preventing the overturning of the same when horses take fright.	1068	2nd May 1853	Mark Newton.
Breaks or drags for wheeled carriages; adapting the carriages for the application and use of such breaks.	1144	10th May 1853	Thomas Murray.
Improvements in carriages	1370	3rd June 1853	William Edward Maude.
Improvements in carriages, scaffoldings, and ladders, which scaffoldings and ladders are used as carriages.	1599	4th July 1853	Marcus Davis.
Depositing metals or alloys of metals (*Bronzing metal for railway-carriages.*)	1777	29th July 1853	William Edward Newton.
Means of carrying, bedding and bathing the injured, ill or invalid persons.	1826	4th Aug. 1853	Barthelemy Louis François Xavier Flechelle.
Improvements in certain kinds of carriages (*Cabs.*)	2162	17th Sept. 1853	Thomas Edwards Lilly.
Apparatus for cleaning carriages, &c.	2344	12th Oct. 1853	Robert William Waithman.
Construction of railway-carriages	2376	15th Oct. 1853	Frederick Samson Thomas.
Construction of railway-carriages whereby, in the event of collision, the crushing of the carriages will be prevented.	2501	29th Oct. 1853	Edwin Dalton Smith.
Construction of waggons	2516	31st Oct. 1853	John Brown.
Construction of carriages; means of preventing the overturning of the same when horses take fright.	2524	1st Nov. 1853	Mark Newton.
Improvements in cooking stoves (*Stove stand or wheelbarrow.*)	2667	17th Nov. 1853	William Underwood.
Hand and draught carriages for common roads	2668	17th Nov. 1853	Charles Burton.
Railway and other carriages and vehicles	2673	18th Nov. 1853	Perceval Moses Parsons.
Construction of certain descriptions of vehicles (*Dog-carts.*)	2701	21st Nov. 1853	Aaron Parfitt.
Hearses; receptacles for coffins, for their transmission.	2720	23rd Nov. 1853	Henry Robert Abraham.
Carts for distributing water or liquid manure	2943	17th Dec. 1853	Isaac James.

See also { "AXLES, &c." "SPRINGS." "WHEELS, &c."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COAL-BOXES.			
An improved construction of coal-box - -	2196	22nd Sept. 1853	Samuel Alexander Benetfink.
COATING, COVERING, PLATING, SHEATHING.			
I.—Coating, Plating, and Gilding Metal, Wood, Glass, &c.			
Manufacture of spoons and forks and other similar articles for domestic use. (*Plating.*)	401	16th Feb. 1853	Job Cutler.
Coating iron with copper and brass - -	421	17th Feb. 1853	Charles Watt. Hugh Burgess.
Application of porcelain and similar materials to ornamenting purposes. (*Coating iron, wood, &c.*)	637	14th March 1853	John Henry Johnson.
Manufacture of knives and forks - - - (*Tinning tangs.*)	756	29th March 1853	George Shaw.
Welding cast steel with iron, steel, cast iron, and other metals. (*Coating with borax.*)	880	12th April 1853	François Félix Verdié.
Compositions for coating wood, metal, and other materials exposed to the action of sea-water or the weather - - - - - -	976	22nd April 1853	Edward Onslow Aston. George Germaine.
Combining india-rubber with certain metals - (*Gilding in devices.*)	1095	4th May 1853	Charles Goodyear.
Coating or plating vessels and other articles for the better resistance of the action of acids and salts.	1138	9th May 1853	John Henry Johnson.
Taking impressions and producing printing-surfaces - - - - - - -	1164	11th May 1853	William Bradbury. Frederick Mullett Evans.
Locks and keys, partly applicable to window-sashes and doors.	1310	27th May 1853	William Henry Bentley.
Apparatus for manufacturing chlorine or chlorides (*Lining stills.*)	1359	2nd June 1853	William Boyd.
Depositing metals or alloys of metals - -	1777	29th July 1853	William Edward Newton.
Process of coating cast iron with other metals and the alloys of other metals.	1836	5th Aug. 1853	William Newton.
Desks, work-boxes, dressing-cases, tea-caddies, and similar articles; arrangements and fittings thereof. (*Covering or lining.*)	1859	10th Aug. 1853	John George Taylor.
Manufacture and ornamenting or coating of articles when compounds containing india-rubber are used. (*Electro-plating.*)	2009	30th Aug. 1853	Charles Goodyear.
Mode of protecting iron of every kind against the action of the weather, of rain, river, spring, and sea water, so that iron thus protected may be used for roofing, for cisterns, pipes, gutters, window-frames, telegraphic wires for marine and various other purposes.	2215	27th Sept. 1853	Nicholas Callan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, &c.—*continued.*			
Manufacture and ornamenting of china, porcelain, and pottery wares. (*Electro-plating.*)	2292	7th Oct. 1853	William Ellis.
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for roofing, cisterns, baths, gutters, pipes, window-frames, telegraphic wires for marine and various other purposes.	2340	12th Oct. 1853	Nicholas Callan.
Daylight reflectors; apparatus to be used in connection therewith - - - - -	2458	25th Oct. 1853	John Fordred. Thomas Boyle.
Deposition of metals and metallic alloys - -	2579	7th Nov. 1853	Henry Pershouse. Timothy Morris.
Ornamenting woven fabrics and other surfaces -	2746	25th Nov. 1853	Alexander Drew.
Printing oil-cloths and other fabrics - - (*Producing electrotype plates.*) (*Communicated by Benjamin Underwood.*)	2836	6th Dec. 1853	John Henry Johnson.
XI.—Coating and Facing Floors, Chimney-pieces, Sinks, Bricks, &c.			
Ornamenting walls, ceilings, and other surfaces -	144	20th Jan. 1853	William Riddle.
Application of granite and similar substances to ornamenting purposes and to the construction of buildings. (*Also for decorating walls, &c.*)	333	7th Feb. 1853	John Londe Tabberner.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*Covering buildings, terraces, copings, gutters, floorings.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
Paving and covering places - - - - - (*Covering buildings.*)	567	7th March 1853	Jacques Francois Dupont de Bussac.
Application of porcelain and similar materials to ornamenting purposes. (*Coating plaster, &c.*)	637	14th March 1853	John Henry Johnson.
Producing ornamental glass surfaces - - - (*Also coating bricks.*)	858	9th April 1853	Adolphe Marius Alexandre Iglesia.
Improvements in building materials - - - (*Coating.*)	1001	26th April 1853	John Pym.
Application of the slags or refuse matters obtained during the manufacture of metals. (*Coating walls.*)	1995	27th Aug. 1853	George Robinson.
Application of sulphate of lime to the fabrication of mosaics and incrustations, and for any new processes of colouration of certain varieties of this substance. (*Facing walls, chimney-pieces, &c.*)	2080	2nd Sept. 1853	Barthélemy Auric.
A certain manner of preparing marquetry and all other kinds of inlaid work in veneers of various thicknesses; fixing the same to walls and ceilings of whatever kind, and in or upon floors of wood, stone, or metal; rendering such floors water and fire proof.	2198	23rd Sept. 1853	Charles Alexander.
Improvements in mantel-pieces - - - - -	2309	8th Oct. 1853	William Potts.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, &c.—*continued.*			
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for roofing, &c.	2340	12th Oct. 1853	Nicholas Callan.
Certain improvements in kitchen sinks - - (*Coating with glass.*)	2763	26th Nov. 1853	Thomas Chambers. John Chambers.
III.—Coating and Sheathing Ships and Boilers; Compositions for Coating.			
Protecting vessels and exposed surfaces from injury or decay.	95	13th Jan. 1853	George Fife.
Preparing compositions for coating iron and other ships' bottoms, and other surfaces.	121	18th Jan. 1853	Henry Browning.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*Sheathing vessels.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
Compositions for coating wood, metal, and other materials exposed to the action of sea water or the weather - - - - - -	976	22nd April 1853	Edward Onslow Aston. George Germaine.
Composition for coating and preventing the decay of exposed surfaces.	1092	4th May 1853	James Edgar Cook.
Construction of ships, vessels, or boats - -	1432	13th June 1853	John Buchanan.
Steam-engines; production of steam for the same - (*Coating the boiler.*)	1491	18th June 1853	John Moore Hyde.
Preparation of wood for sheathing ships, as a substitute for copper and other metals; also in house, ship, and pier building.	2323	11th Oct. 1853	Henry Kemp.
Building ships and other vessels - - -	2362	13th Oct. 1853	Thomas Grahame.
IV.—Coating and Lining Pipes, Taps, Valves, and Gauges.			
Steam-boilers - - - - - - (*Coating gauges.*)	447	21st Feb. 1853	John Charles Pearce.
Improvements in cocks - - - -	928	16th April 1853	Henry Wilks.
Improvements in coating tubes - - -	942	19th April 1853	John Chatterton.
Combining materials for making a more perfect fabric for suction-hose, mill-bands, harness, and for all other similar purposes to which the same may be applied. (*Lining with wire.*)	1326	30th May 1853	George Wells.
Improvements in carriages, scaffoldings and ladders, which scaffoldings and ladders are used as carriages. (*And galvanizing tubes.*)	1599	4th July 1853	Marcus Davis.
Improvements in the working barrels of pumps, which improvements are also applicable to lining other metallic tubes.	2024	31st Aug. 1853	John Phillips Grazebrook.
Steam-boilers; apparatus applicable thereto and to be used therewith - - - - - (*Lining valves.*)	2029	2nd Sept. 1853	John Tayler. James Griffiths. Thomas Lees.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, &c.—*continued.*			
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for pipes, &c.	2340	12th Oct. 1853	Nicholas Callan.
Machinery for making pipes, sheets, still-worms, and other articles from that class of metals called soft metals, as lead, tin, zinc, bismuth, or alloys of soft metals that are capable of being forced out of metal-receivers or chambers through dies, cores, &c. (*Lining with metal, coating with gutta-percha, &c.*)	2784	30th Nov. 1853	Edward Keating Davis.
V.—Covering Rollers.			
Certain new combinations of gutta-percha with other materials; method of applying such for use.	906	14th April 1853	John Wallace Duncan.
Treating or preparing yarns or threads - - (*Rollers covered with vulcanized india-rubber.*)	1330	30th May 1853	William Green.
Washing wool and hair; treating and preparing before being spun wool, flax, cotton, and similar fibrous materials. (*Covering washing-rollers.*)	1539	24th June 1853	Samuel Cunliffe Lister.
Looms for weaving - - - - - (*Taking-up rollers.*)	1554	27th June 1853	William Fairclough.
Machinery or apparatus for covering rollers used in the manufacture of cotton and other textile materials, with leather, cloth, and other substances.	1778	29th July 1853	William Wild.
Machinery for washing wool and hair - - (*Washing-rollers.*)	1794	1st Aug. 1853	Samuel Cunliffe Lister.
Manufacture by machinery of tubes from leather or other suitable flexible substance, chiefly for covering the drawing rolls of spinning machinery;—also applicable to other purposes.	2171	19th Sept. 1853	Charles Collins.
VI.—Coating Wire-gauze and Wire.			
Covering, laying, and uniting wires and ropes for telegraphic purposes; machinery employed therein.	185	25th Jan. 1853	William Thomas Henley.
Manufacture of pianoforte wire, applicable also to articles of iron and steel generally.	423	18th Feb. 1853	James Horsfall.
Manufacture of wire - - - - -	448	21st Feb. 1853	John Davie Morries Stirling.
Safety-lamps - - - - - - (*Wire gauze.*)	458	23rd Feb. 1853	Reuben Plant.
Machinery for covering wire, silk, cotton, linen, wool, or any other flexible material, with wire-plate, silk, cotton, linen, wool, or any other flexible material.	927	16th April 1853	Isaac Simpson.
Manufacture of covering materials for houses and other structures and surfaces. (*Coating wire cloth.*)	1238	19th May 1853	Thomas Grahame.
Depositing metals or alloys of metals - - (*Bronzing wire.*)	1777	29th July 1853	William Edward Newton.
Modes of protecting wires for telegraphs - -	1779	30th July 1853	William Thomas Henley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, &c.—*continued.*			
Means or processes for preserving metals from corrosion.	1789	1st Aug. 1853	John Carvalho de Medeiros.
Electric conductors; means of insulating electric conductors.	1889	12th Aug. 1853	Thomas Allan.
Manufacture of flexible tubes and bands; covering wire - - - - - -	2166	17th Sept. 1853	Christopher Nickels. Ralph Selby.
Protecting telegraph wires - - -	2307	8th Oct. 1853	William Wilkinson.
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for telegraphic wires for marine and various other purposes.	2340	12th Oct. 1853	Nicholas Callan.
Means of insulating wire - - - -	2371	14th Oct. 1853	John Farrell.
Electric telegraphs - - - -	2846	8th Dec. 1853	William Thomas Henley.
Insulating wire used for electric telegraphs, with a view to obviate the effects of return or inductive currents.	2956	20th Dec. 1853	Josiah Latimer Clark.
VII.—Coating and Plating Yarns and Fabrics, also Bands and Ropes.			
Preparation or treatment of twine or other threads, or cuttings of paper or other waste, for the production of useful and ornamental articles.	821	5th April 1853	William Pidding.
Certain new combinations of gutta-percha with other materials; method of applying such for use. (*Coating ropes.*)	906	14th April 1853	John Wallace Duncan.
Machinery for covering silk, cotton, linen, wool, or any other flexible material, with wire-plate, silk, cotton, linen, wool, or any other flexible material.	927	16th April 1853	Isaac Simpson.
Treating or preparing yarns or threads - -	1330	30th May 1853	William Green.
Manufacture of waterproof or partly waterproof fabrics.	1483	18th June 1853	Henry Bessemer.
Impregnating, saturating, or coating threads, yarns, and fabrics with metal—"Metallic dyeing." (*Communicated by Charles Depouly.*)	1593	2nd July 1853	Richard Archibald Brooman.
Manufacture of coloured and ornamented fabrics -	2494	27th Oct. 1853	Richard Archibald Brooman.
Ornamenting woven fabrics and other surfaces - (*By electro-deposition.*)	2746	25th Nov. 1853	Alexander Drew.
Belts or bands for driving machinery, for use in mines, and for other purposes.	2936	16th Dec. 1853	Robert William Waithman.
Manufacture of elastic fabrics - - -	2940	17th Dec. 1853	Caleb Bedells.
Coating silk and other yarn or thread with gold or other metal.	2985	23rd Dec. 1853	Francis Bennoch.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATS, CAPES, CLOAKS, WRAPPERS, OUTER GARMENTS.			
Manufacture of travelling cases, wrappers, and certain articles of dress hitherto manufactured of leather - - - - - - (*Railway wrappers.*)	17	4th Jan. 1853	Joseph James Welch. John Stewart Margetson.
Manufacture of hats, caps, and bonnets;—applicable to other articles of wearing-apparel. (*Linings or stiffeners for coats, &c.*)	268	31st Jan. 1853	Thomas Charles Clarkson.
Garments for travelling - - - -	325	5th Feb. 1853	Henry John Nicoll.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*Wrappers.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
Manufacture of textile fabrics - - - (*For top-coats, cloaks, rugs, and wrappers.*)	354	10th Feb. 1853	John Hunter.
Garments; sewing or uniting the seams of the same.	869	11th April 1853	Donald Nicoll.
Means of depriving caoutchouc of all unpleasant odour, and of imparting to it various agreeable perfumes. (*For coats, pâletots, &c.*)	1982	26th Aug. 1853	Eugène de Varroc.
Case or cover for umbrellas, which can also be worn as a garment. (*Capes.*)	2485	27th Oct. 1853	Thomas Dawson.
An improved cloak - - - -	2849	8th Dec. 1853	William Chickall Jay.
Coats and similar articles of dress - -	2903	14th Dec. 1853	Robert Parrock.
COFFEE ROASTING, PULPING, GRINDING; CHOCOLATE-MAKING.			
Construction and use of coffee-roasters - -	273	1st Feb. 1853	John Cockerill. Thomas Barnett.
Machinery employed for pulping coffee - -	679	18th March 1853	Robert Bowman Tennent.
Apparatus for roasting coffee, cocoa, and other vegetable matters, and for cooling the same when roasted.	848	8th April 1853	Alexander Samuel Braden.
Means of conveying and distributing or separating granular and other substances - - (*Roasting grain.*)	1040	29th April 1853	Robert Davison. James Scott Horrocks.
Method of roasting coffee, cocoa, and chicory -	1213	17th May 1853	George Berry.
Preparation of certain vegetable and alimentary substances.	1468	16th June 1853	Peter Armand le Comte de Fontainemoreau.
Apparatus for roasting or desiccating coffee, cocoa, and chicory.	1496	18th June 1853	George Robinson.
Obtaining motive-power - - - - (*Turning coffee-mills.*)	1868	11th Aug. 1853	Thomas Dewsnup.
Preparation and application of gluten - - (*In making chocolate.*) (*Communicated by François Durand.*)	2004	29th Aug. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COFFINS; COFFIN FURNITURE.			
Manufacture of a vitrified substance, and its application alone or in combination with mineral, earthy, and plastic substances, to various useful purposes in the arts, and for certain other new applications of known plastic substances. (*For making coffins.*)	7	1st Jan. 1853	Joseph Brough.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*Covering coffins and tombs.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
The application of certain materials to the manufacture of coffin furniture.	531	3rd March 1853	Charles Humpage.
Coffins, catacombs, sarcophaguses, and cenotaphs -	1670	14th July 1853	The Honourable Sir Richard Brown.
Manufacture or treatment of gutta-percha; application thereof. (*For making coffins.*) (*Communicated by Louis François Alexandre Deseille.*)	1904	13th Aug. 1853	John Henry Johnson.
Coffins and hearses; receptacles for coffins, for their transmission.	2720	23rd Nov. 1853	Henry Robert Abraham.
COIN DETECTORS.			
Apparatus for distinguishing genuine from counterfeit coin.	1979	25th Aug. 1853	George Davis.
COKE AND CHARCOAL.			
Process of and apparatus for distilling certain vegetable and mineral matters; also animal bones and flesh.	174	24th Jan. 1853	David Clovis Knab.
Filters - - - - - - - (*Preparing charcoal.*)	481	25th Feb. 1853	Antonio Fedele Cossus.
Manufacture and refining of sugar - - -	487	26th Feb. 1853	Joseph Brandeis.
Improvement in locomotives, part of which improvements are applicable to other steam-engines. (*Converting the coal into coke.*)	533	3rd March 1853	Auguste Edouard Loradoux Bellford.
Treatment or manufacture of animal charcoal -	639	14th March 1853	John Scott.
Applying to illuminating the extract of bituminous products of coal, peat, and lignites; rectifying and depurating the essences and greasy matter from coal. (*And obtaining charcoal.*)	770	31st March 1853	William Augustus Pascal Aymard.
Manufacture of coke from raw peat - -	813	5th April 1853	John O'Connor.
Apparatus for the manufacture of coke, &c. -	820	5th April 1853	John Thomas.
Manufacture or production of charred peat - -	875	12th April 1853	James Taylor.
A furnace called "The Vestal Furnace," for the carbonization of peat or turf or other substances.	934	18th April 1853	Hans Wallace Allen.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COKE, &c.—*continued.*			
Charring peat and other vegetable substances; burning lime.	1229	18th May 1853	John Barsham.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids. (*And for making charcoal.*)	1363	3rd June 1853	Ferdinand Louis Gossart.
Manufacture of coke - - - -	1584	1st July 1853	Philip Hart.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Burning and reburning animal charcoal - -	2011	30th Aug. 1853	James Picciotto.
Conversion of peat into charcoal - - -	2070	8th Sept. 1853	William Hall.
Apparatus applicable to the manufacturing and the revivification of animal or vegetable charcoal, and other useful purposes.	2388	17th Oct. 1853	George Frederick Chantrell.
Carbonizing and distilling peat, coal, wood, and other animal, vegetable, and mineral substances.	2435	21st Oct. 1853	Jean François Felix Challeton.
Apparatus for subjecting substances to the action of heat, for carbonizing, calcining, or combining such substances, or for subjecting such substances to the process of distillation.	2827	5th Dec. 1853	Edward Lavender.
Distillation of organic substances; obtaining products therefrom. (*Obtaining charcoal.*)	2868	9th Dec. 1853	John Chisholm.
Disinfecting sewers or other drains or depositories of fetid matters or gases; converting the contents thereof to useful purposes. (*Producing peat charcoal.*)	2876	10th Dec. 1853	Allan Macpherson
See also "OVENS, &c."			
,, "FURNACES."			
COLOURING, MARBLING, OR VEINING METAL, STONE, WOOD, AND PAPER.			
Manufacture of bobbins - - - - (*Colouring.*)	494	26th Feb. 1853	Charles Titley.
Treatment of natural and artificial stone, and of articles composed of porous cements or plaster, for the purpose of hardening and colouring the same.	1051	30th April 1853	Barnabas Barrett.
Art or process of applying colours to a surface by means of a liquid. (*Marbling or veining.*)	2203	24th Sept. 1853	Hiram Tucker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CONCENTRATING BY EVAPORATION.			
Treating soap-suds - - - - -	460	23rd Feb. 1853	Samuel Cunliffe Lister.
Applying to illuminating the extract of bituminous products of coal, peat, and lignites; rectifying and depurating the essences and greasy matter from coal. (*Concentrating naphthaline.*)	770	31st March 1853	William Augustus Pascal Aymard.
Treatment of ores and other substances containing metals to obtain products therefrom; apparatus used therein. (*Concentrating from metallic solutions.*)	912	14th April 1853	David Zenner.
Machinery or apparatus for evaporating or concentrating liquids.	1278	25th May 1853	George Irlam Higginson.
Mode of heating madder and munjeet, by which the quality of the colouring matter contained in those substances is greatly improved, and its application to dyeing and printing much facilitated.	1627	8th July 1853	William Maddick.
Method of purifying and concentrating the colouring matter of madder, munjeet, spent madder, or any preparations thereof, however they may be made.	2776	29th Nov. 1853	Edward Joseph Hughes.
CONDENSING, COOLING, MAKING ICE; CONCENTRATING BY REFRIGERATION.			
Motive-power engines; application of motive-power to the same. (*Condensers and refrigerators.*)	12	3rd Jan. 1853	Edme Augustin Chameroy.
Economizing fuel in the generation and heating of steam. (*Condensing and cooling.*)	69	11th Jan. 1853	Joseph Beattie.
Apparatus for refrigerating - - - (*Condensing steam or gas; concentrating alcohol, essences, acids.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Refrigerating apparatus - - - - (*For making ice.*)	147	20th Jan. 1853	William Williams.
Furnaces and apparatus combined therewith for making wrought iron directly from the ore, and for collecting and condensing the oxydes or other substances evaporated in the process of deoxydizing iron or other ores.	283	2nd Feb. 1853	Auguste Edouard Loradoux Bellford.
Steam-engines - - - - - (*Condensing steam.*)	356	10th Feb. 1853	James Anderson.
Vessels or apparatus for containing and preserving ale, beer, and other liquids. (*Cooling.*)	415	17th Feb. 1853	Matthias Walker.
Production of spirit; stills and apparatus employed therein. (*Refrigerators.*)	468	24th Feb. 1853	Charles Flude.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CONDENSING, &c.—*continued.*			
Treatment or manufacture of animal charcoal - (*Cooling tubes.*)	639	14th March 1853	John Scott.
Obtaining power when air is employed - - (*Cooling compressed air.*)	692	21st March 1853	Moses Poole.
Ice-pails or apparatus for refrigerating - -	843	7th April 1853	William Fuller.
Apparatus for roasting coffee, cocoa, and other vegetable matters, and for cooling the same when roasted.	848	8th April 1853	Alexander Samuel Braden.
Steam boilers; mode of supplying the same with water. (*Cooling fire-plates.*)	884	12th April 1853	Alfred Vincent Newton.
Distributing power to machine-shops, factories, and other places. (*Refrigerating and making ice.*)	1024	27th April 1853	Richard Jordan Gatling.
Apparatus for freezing, cooling, and churning -	1069	4th May 1853	Thomas Masters.
Obtaining certain saline compounds from solutions containing such compounds. (*Cooling.*)	1455	15th June 1853	William Gossage.
Manufacture or production of cheese - - (*Cooling the milk.*)	1728	21st July 1853	Edward Cockey. Henry Cockey. Francis Christopher Cockey.
Improvements in evaporating - - - (*Also cooling.*)	1895	13th Aug. 1853	Frederick Lipscombe.
Steam-boilers; apparatus applicable thereto, and to be used therewith - - - - - (*Cooling.*)	2029	2nd Sept. 1853	John Taylor. James Griffiths. Thomas Lees.
Coversion of peat into charcoal - - - (*Cooling.*)	2070	8th Sept. 1853	William Hall.
Apparatus and means for removing matters or heat from currents of air, gases, or vapours, or from liquids.	2123	13th Sept. 1853	Moses Poole.
Mode of constructing steam-boilers; applicable also in part to the construction of condensers.	2188	21st Sept. 1853	Alfred Vincent Newton.
Carbonizing and distilling peat, coal, wood, and other animal, vegetable, and mineral substances. (*Condensing.*)	2435	21st Oct. 1853	Jean François Felix Challeton.
Cooling and freezing mixture - - -	2517	31st Oct. 1853	Damiano Asanti.
Abstracting and condensing smoke arising from steam-engines and other furnaces.	2548	3rd Nov. 1853	William Wood.
Improvements in surface-condensers and in evaporators and heaters for steam-engines.	2682	18th Nov. 1853	Moses Poole.
Apparatus for the production of carburetted hydrogen gas. (*Condensers.*)	2702	21st Nov. 1853	Sir John Scott Lillie.
Improvements in rotary engines - - - (*Condensing steam.*)	2751	25th Nov. 1853	Auguste Edouard Loradoux Bellford.
Obtaining motive-power by means of heated gases - (*Cooling air or gases.*)	2768	28th Nov. 1853	Prix Charles Jean Baptiste Sochet.
Treatment or manufacture of caoutchouc - - (*Condensing the vapour.*) (*Communicated by Charles Eugène Francois Guibal and Louis Philippe Bernard Edouard Cumenge.*)	2798	1st Dec. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CONDENSING, &c.—*continued.*			
Steam-engines; apparatus connected therewith - (*Condensing steam; cooling the water.*)	2866	9th Dec. 1853	James Sutcliffe.
Manufacturing liquid quartz or silex to be used in the manufacture of certain compositions for ornamental and useful purposes. (*Condensing the vapour.*)	2991	24th Dec. 1853	Harris Hardinge.
CONFECTIONARY AND LOZENGES.			
Machine for the manufacture of confections, including all kinds of comfits known by the trade as pan-goods.	1308	27th May 1853	Alexander Keiller.
Preparation of certain vegetable and alimentary substances. (*For sweetmeats.*)	1468	16th June 1853	Peter Armand le Comte de Fontainemoreau.
Mode of making with iodine and its compounds, in combination with substances containing extractive principles, various elementary combinations. (*Lozenges.*)	1487	18th June 1853	Jacques François Dupont de Bussac.
COOKING, BAKING, KNEADING; MAKING VERMICELLI.			
Baking bread - - - - -	301	3rd Feb. 1853	John Crowther. Joseph Alsop.
Preparation of bread and biscuits - - -	386	14th Feb. 1853	Claude Joseph Lambert.
System of cooking more economic, speedy, convenient, and in every respect superior to any now in use, called "Green's economical, self-basting, cooking apparatus."	463	24th Feb. 1853	John Green.
Construction and arrangements of kitchen-boilers and flues for ranges.	490	26th Feb. 1853	Ebenezer Thornton.
An improved apparatus for cooking by gas or vapour.	517	2nd March 1853	Charles Henry Hall.
Preparing and preserving soups—"Soyer's Osmazome Food."	520	2nd March 1853	Alexis Soyer.
Cooking-apparatus - - - - -	573	7th March 1853	John Little.
Application of heat for baking - - - (*Bread and biscuit.*)	751	29th March 1853	John Gray.
Manufacture of unfermented bread; applicable to other purposes as a substitute for yeast -	1016	27th April 1853	George Turner. Robert Holloway.
Asystem of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids.	1363	3rd June 1853	Ferdinand Louis Gossart.
Bread-making - - - - -	1527	23rd June 1853	Noël Natalis du Chastaingt.
A new distilling-apparatus - - -	1531	23rd June 1853	Peter Armand le Comte de Fontainemoreau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COOKING, &c.—*continued.*			
Vessel to be used for the purposes of infusion and decoction, heating liquids, and melting glutinous substances.	1595	4th July 1853	Gabriel Didier Fevre.
Application of heat for baking and drying purposes; generation of steam.	1848	8th Aug. 1853	William Hickson.
Preparation and application of gluten - - (*Making bread, also vermicelli.*) (*Communicated by François Durand.*)	2004	29th Aug. 1853	John Henry Johnson.
Improvements in baking bread - - -	2056	7th Sept. 1853	Joseph Alsop. Edward Fairburn.
Machinery for the manufacture and packing of bread or biscuits.	2223	28th Sept. 1853	William Hickson.
Apparatus for baking - - - - -	2246	1st Oct. 1853	Thomas Hendry.
Kneading dough;—applicable also to the kneading of other materials.	2566	4th Nov. 1853	Henry Pratt.
Extracting and treating the juice of beetroot and other vegetables. (*Making bread from the residue of cereals.*)	2855	8th Dec. 1853	Philippe Joseph Toussaint Bordone.
An improved cooking-apparatus - - -	2954	20th Dec. 1853	Adam Paterson.
Manufacture of bread - - - - -	2957	20th Dec. 1853	Henriette Elisa Farion de Gergy.
See also "OVENS, &c."			
COPYING-PRESSES.			
Copying-presses - - - - - - -	404	16th Feb. 1853	Joseph Skertchly.
A press applicable to lithography, autography, typography, chromo-lithography or printing in colours, copperplate printing, cylinder printing, embossing, and copying letters.	1861	10th Aug. 1853	Alexander Prince.
Manufacture or treatment of gutta-percha; application thereof. (*Communicated by Louis François Alexandre Deseille.*)	1904	13th Aug. 1853	John Henry Johnson.
CRATES, BASKETS AND HAMPERS.			
Manufacture of portable packages - - - (*Baskets, &c.*)	687	21st March 1853	James Fraser.
Manufacture of crates made of wood, for the use of potters.	2194	22nd Sept. 1853	Thomas West Walker.
Case or hamper for carrying wine, spirits, and other liquids in bottle.	2502	29th Oct. 1853	Peter Owen Bernard.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CURLING HAIR.			
Apparatus for curling hair	1616	6th July 1853	John Woodward.
CUTTING, SAWING, PLANING, FILING.			
I.—Cutting, Sawing, and Planing Metal, Wood, and Cork.			
Manufacturing percussion-caps	55	8th Jan. 1853	John Abraham.
Cutting or reducing wood and other substances	77	12th Jan. 1853	John McDowall.
Machinery for cutting or shearing iron and other metals.	250	31st Jan. 1853	Walter Williams.
Machinery or apparatus applicable to planing, slotting, shaping, grooving, or other similar purposes.	364	11th Feb. 1853	Robert Thomas.
Railways	412	17th Feb. 1853	William Bridges Adams.
Machinery for the manufacture of casks, barrels, and other similar vessels.	476	25th Feb. 1853	John Grist.
Machinery for slotting, tenoning, mortising, grooving, vertical planing, &c.	608	10th March 1853	John Powis. Jabus Stanley James.
Manufacturing casks, vats, and other like vessels; machinery or apparatus to be employed for such purpose (*Planing, grooving, and chiming the staves.*)	636	14th March 1853	Bennett Alfred Burton. Henry Mortimer Burton.
Improvements in fishes and fish-joints for connecting the rails of railways. (*Planing.*)	651	16th March 1853	Charles Heard Wild.
Machine for mortising and tenoning	663	18th March 1853	Richard Peters.
Machinery for planing or reducing boards or timber.	702	22nd March 1853	Nicholas G. Norcross.
Block-making machinery (*Sawing sheaves.*)	710	23rd March 1853	William Mann Crossland.
Manufacture of textile materials (*Grooving drawing-rollers.*)	722	24th March 1853	William Edie.
Machinery or apparatus for stamping and cutting iron or other substances—"Steam hammer."	816	5th April 1853	Joseph Haley.
Machinery for the manufacture of casks, barrels, and other similar vessels.	834	7th April 1853	John Grist.
Machinery for cutting, carving, &c. wood, metal, and other suitable materials.	856	9th April 1853	George Searby.
Machinery for cutting and uniting metals	867	11th April 1853	Hugh Donald.
Cutting out and piercing metals	897	13th April 1853	Thomas Lovell Preston.
Improved machinery for cutting or shaping corks and bungs	925	16th April 1853	Joseph Cooke. William Cooke.
Cutting and planing wood and other substances	971	22nd April 1853	William Hunter.
Sawing-machines for slitting or re-sawing plank and other timber by means of circular saws.	1065	2nd May 1853	Auguste Edouard Loradoux Bellford.
Machinery for cutting or shearing metals	1071	3rd May 1853	Thomas Claridge.
Machinery for manufacturing screws	1076	3rd May 1853	Severin Virgile Bonneterre.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CUTTING, &c.—*continued.*			
Machine for pegging boots or shoes - - (*Splitting the wood.*) (*Communicated by Edward L. Norfolk.*)	1195	14th May 1853	Moses Poole.
Manufacture of casks or wooden vessels - -	1401	7th June 1853	Robert Bouty Cousens.
Improvements in turning-lathes;—partly applicable to other useful purposes.	1410	9th June 1853	William Muir.
Mode of manufacturing metallic handles for knives and forks, backs for razors, bows for scissors, and the relative parts of such like instruments. (*Also saws.*)	1428	13th June 1853	William Smith.
Apparatus for cutting and shaping cork, wood, and other similar substances.	1435	13th June 1853	Robert Hopkins.
Manufacture of edge tools usually made of steel - (*Saws.*)	1530	23rd June 1853	Thomas Weatherburn Dodd.
Method of producing designs and patterns in wood.	1578	30th June 1853	George Sterry.
Cutting and shaping - - -	1643	9th July 1853	George Pearson Renshaw.
Manufacture of saws - - - -	1742	23rd July 1853	Joseph Bennett Howell. William Jamieson.
Manufacture of cutting tools - - - (*Planes or turning tools.*)	1752	25th July 1853	Alfred Vincent Newton.
Machine for mortising, &c. - - -	1773	28th July 1853	Theodore Dethier.
Machinery or apparatus for cutting discs or circles out of plates or sheets of metal or other substances	2033	2nd Sept. 1853	John Sibley. Thomas Sibley.
Mode or method of cutting and finishing brass rule and wood reglet used in the art or process of letterpress printing and other similar purposes; machinery or apparatus employed therein.	2073	9th Sept. 1853	Philip Grant. John Doherty.
Stave jointing or shaping machine - -	2092	10th Sept. 1853	John Grist.
Machinery for cutting veneers - - -	2102	10th Sept. 1853	Jules François Chack.
Improvements in lathes and in apparatus connected therewith for cutting, turning, or boring wood, metal, or other substances.	2103	12th Sept. 1853	William Weild.
Manufacture of taper tubes; apparatus connected therewith.	2161	20th Sept. 1853	Ferdinand Potts.
Machinery for the manufacture of casks and barrels	2183	20th Sept. 1853	Stephen Neale. William Blanchard Jerrold. Conrad Montgomery.
Manufacture of crates made of wood, for the use of potters. (*Sawing.*)	2194	22nd Sept. 1853	Thomas West Walker.
Mortising-machine - - - -	2200	23rd Sept. 1853	Robert Varvill.
Machinery for cutting metal or other substances -	2225	28th Sept. 1853	William Edward Newton.
Means of cutting, carving, &c. metallic or other surfaces.	2382	15th Oct. 1853	Thomas Woodcock.
Improved mortising-machine - - -	2423	20th Oct. 1853	John France.
Manufacture of veneers; machinery and apparatus connected therewith - - -	2480	26th Oct. 1853	Thomas Dunn. William Gough.
Machinery or apparatus for cutting and shaping metals and other substances.	2508	31st Oct. 1853	Joseph Haley.
Cutting tools; working of iron, brass, and other metals, and wood and other materials - - (*Planing.*)	2526	1st Nov. 1853	John Whitehead. Thomas Whitehead.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CUTTING, &c.—*continued.*			
Wood-cutting machinery	2533	1st Nov. 1853	Robert Archbutt.
Manufacture of swords, bayonets, and sword bayonets	2550	3rd Nov. 1853	Charles Reeves, junior.
Casks and machinery or apparatus for the manufacture of casks	2555	3rd Nov. 1853	George Duncan. John Boyd. John Barker.
Means of holding staves while being cut	2613	11th Nov. 1853	Richard Dryburch.
Certain improvements in straining mill saws	2761	26th Nov. 1853	Auguste Edouard Loradoux Bellford.
Machinery or apparatus for tenoning, mortising, and sawing wood, metal, or other materials.	2800	2nd Dec. 1853	James Reilly.
Machinery for cutting corks	2955	20th Dec. 1853	James Hunter Campbell.
II.—Cutting, Sawing, and Planing Slate, Stone, and Marble.			
Machinery for planing slate	472	24th Feb. 1853	Thomas Browne Jordan.
Machinery for cutting, carving, &c. stone and other suitable materials.	856	9th April 1853	George Scarby.
Manufacture of articles of marble (*Cutting.*)	1188	13th May 1853	John Knowles. Edward Taylor Bellhouse.
Machinery for sawing stone and marble	1466	16th June 1853	Richard Archibald Brooman.
Machinery for cutting stone	2122	13th Sept. 1853	Emerson Goddard.
III.—Cutting Files and Rasps; Filing.			
Renewing the teeth of files	30	6th Jan. 1853	Emile Grillet.
Machine or instrument for cutting files and forging metal.	545	4th March 1853	Robert Craib Ross.
Manufacture of files, rasps, and other edge tools usually made of steel.	1530	23rd June 1853	Thomas Weatherburn Dodds.
Mode of manufacturing files and rasps	1731	22nd July 1853	Thomas Gray.
Manufacture of saws (*Filing.*)	1742	23rd July 1853	Joseph Bennett Howell. William Jamieson.
IV.—Cutting Fustians; Cutting and Splitting Piled Fabrics.			
Certain improvements in weaving, and in machinery for weaving hat-plush and other cut-piled fabrics.	317	5th Feb. 1853	Thomas Peacock.
Looms for weaving (*Cutting pile fabrics.*)	438	21st Feb. 1853	Samuel Rodgers Samuels. Robert Sands.
Improvements in pile and looped fabrics; cutting and finishing such fabrics; machinery employed therein. (*And leaving pressed parts or designs uncut.*)	657	17th March 1853	John Livesey.
Manufacture of certain descriptions of woven fabrics (*Velvets or piled fabrics, woven two pieces one over the other and cut asunder.*)	713	24th March 1853	John Beaumont.
Method of preparing, treating, and finishing cut-piled or raised fustians and other similar goods or fabrics; machinery or apparatus connected therewith.	732	26th March 1853	James Worrall, junior.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CUTTING, &c.—*continued.*			
Method of preparing, treating, and finishing certain textile fabrics called cords, thicksets, velveteens, and beaverteens.	768	30th March 1853	James Worrall, junior.
Manufacture of carpets - - - - -	935	18th April 1853	William Fawcett. Francis Best Fawcett.
Cutting the pile of velvet, velveteens, and other piled fabrics.	975	22nd April 1853	Jerome André Drieu.
Mode of cutting lappet-cloths or other similar fabrics.	1462	16th June 1853	John Blair.
Treatment or manufacture of ornamental fabrics -	1610	6th July 1853	John Hood. William Hood.
Machinery for cutting fustians, velvets, and other similar fabrics.	1619	7th July 1853	James Cheetham.
Machinery or apparatus for cutting the pile of woven fabrics.	1930	18th Aug. 1853	David Chalmers.
Machinery for the manufacture of terry or cut-pile fabrics;—partly applicable to the weaving of other fabrics.	1947	20th Aug. 1853	Robert Moore Sievier.
Machinery for cutting woven and other fabrics -	1955	22nd Aug. 1853	Frederick Osbourn.
Machinery for cutting velveteens and certain other fabrics to produce a piled surface.	2598	9th Nov. 1853	Jerome André Drieu.
Manufacture of fabrics made of silk, cotton-wool, flax, hemp, straw, grasses, fibres, mohair and other hair, spun-glass, and enamelled, glazed, or plain wire; application of some of those materials; machinery or apparatus connected therewith. (*Cutting or splitting cemented goods.*)	2602	10th Nov. 1853	William Pidding.
Looms for weaving pile-fabrics; mode and apparatus for cutting the pile.	2922	16th Dec. 1853	Antoine Limousin.
V.—Cutting Rags, Ropes, and Waste; making Lint.			
An improved rag tearing and separating machine -	730	26th March 1853	Richard Archibald Brooman.
Machinery for raising a pile or flue by abrasion on linen, cotton, silk, and other fabrics. (*Making lint.*)	1309	27th May 1853	William Wolfe Bonney.
Converting certain refuse materials into yarn for the manufacture of woven and other fabrics.	2061	7th Sept. 1853	George Edward Ashton.
Method of treating silk waste arising from winding, warping, and weaving silk, and rendering it capable of being spun or otherwise employed -	2379	15th Oct. 1853	Buckley Royle. William MacEwan Chell.
Machinery for cutting rags, rope, fibrous and other substances - - - - - -	2460	25th Oct. 1853	Alfred Curtis Bryan Donkin.
VI.—Cutting Paper, Cards, and Leather.			
Apparatus for cutting and affixing stamps and labels - - - - - -	242	29th Jan. 1853	George Twigg. Arthur Lucas Silvester.
Improvements in bookbinding to facilitate the finding of places in books.	407	16th Feb. 1853	John George Perry.
Machinery or apparatus for cutting paper and other substances.	593	9th March 1853	James Hogg, junior.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CUTTING, &c.—*continued.*			
Paper and cardboard cutting machines - -	833	7th April 1853	William Morgan.
Producing railway and other tickets and cards -	1485	18th June 1853	Guy Hannington.
Machinery or apparatus for cutting paper and similar materials. (*Communicated by Mons. Pfeiffer.*)	1542	24th June 1853	John Henry Johnson.
Machinery for cutting cardboard, paper, and other similar materials.	1813	3rd Aug. 1853	William Edward Newton.
Method of blocking leather used in the manufacture of boots.	2182	20th Sept. 1853	William Stockil.
Machinery or apparatus for cutting paper - - (*Communicated by Mons. Porier.*)	2222	28th Sept. 1853	John Henry Johnson.
Construction of printing-press - - -	2463	25th Oct. 1853	Alfred Vincent Newton.
Manufacture of envelopes - - - -	2742	25th Nov. 1853	Davidson Nichol.
Machines used for cutting paper - -	2946	17th Dec. 1853	Robert Whewell.
Machinery or apparatus for cutting paper and similar materials.	2986	23rd Dec. 1853	Jean Daniel Pfeiffer.
VII.—Cutting out Garments.			
Cutting out parts of boots and shoes - -	547	4th March 1853	Joseph Sparkes Hall.
Manufacture of shirts - - - -	1355	2nd June 1853	Antoine Remi Cyr Madoré. Daniel Neuburger.
Mode or method of cutting and making up garments so as partially to dispense with seams or sewing.	2156	16th Sept. 1853	Francis Birkin Newton.
Instruments for cutting out parts of garments and other articles; grinding and sharpening cutters for the same.	2717	22nd Nov. 1853	William Pegg.
Cutting or shaping materials to be employed in the manufacture of articles of dress. (*Coats, waistcoats, shirts.*)	2725	23rd Nov. 1853	John Timewell.
Machinery and apparatus for cutting out parts of garments.	2877	10th Dec. 1853	William Muir.
Coats and similar articles of dress - -	2903	14th Dec. 1853	Robert Parrock.
For Chaff-cutting—*see* "FOOD FOR CATTLE, &c." For Rasping Dye-woods—*see* "DYES, &c." For Cutting Candles—*see* "CANDLES, &c." For Slicing Sugar—*see* "SUGAR."			
CYLINDERS, ROLLERS; COVERING ROLLERS.			
A new composition of different metals or metallic substances. (*For moulding cylinders.*)	35	6th Jan. 1853	Edme Augustin Chameroy.
Construction of printing-rollers used in machines for printing calicoes and other substances.	316	5th Feb. 1853	Richard Prosser.
Manufacture of cylinders coated with fine wire webbing, for dressing fine flour by the process of gravitation or sifting without the aid of any internal brushes or fans.	432	19th Feb. 1853	William Rawbonn Dell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CYLINDERS, &c.—*continued.*			
Machinery used in washing wool - - - (*Covering the rollers.*)	584	8th March 1853	Samuel Cunliffe Lister.
Rolling and shaping malleable metals - - (*Applicable for making cylinder covers.*)	701	22nd March 1853	William Johnson.
Manufacture of textile materials - - - (*Drawing-rollers.*)	722	24th March 1853	William Edie.
Engines to be worked by steam or any other elastic fluid. (*Cylinder divided into chambers.*)	735	28th March 1853	David Stephens Brown.
Manufacture of metallic casks and vessels - - (*Also cylinders.*)	903	14th April 1853	William Laycock.
Certain new combinations of gutta-percha with other materials; method of applying such for use. (*Covers for rollers.*)	906	14th April 1853	John Wallace Duncan.
Treating or preparing yarns or threads - - (*Rollers covered with vulcanized india-rubber.*)	1330	30th May 1853	William Green.
Washing wool and hair; treating and preparing before being spun, wool, flax, cotton, and similar fibrous materials. (*Covering washing-rollers.*)	1539	24th June 1853	Samuel Cunliffe Lister.
Looms for weaving - - - - (*Covering rollers.*)	1554	27th June 1853	William Fairclough.
Machinery or apparatus for preparing and spinning cotton and other fibrous materials - - (*Rollers.*)	1555	27th June 1853	John Mason. Luke Ryder.
Manufacture of wooden rollers or cylinders - -	1565	29th June 1853	Frederick Steiner.
Manufacture of printing-rollers - - -	1632	8th July 1853	Moses Poole.
Machinery or apparatus for covering rollers used in the manufacture of cotton and other textile materials, with leather, cloth, and other substances.	1778	29th July 1853	William Wild.
Machinery for washing wool and hair - - (*Covering rollers.*)	1794	1st Aug. 1853	Samuel Cunliffe Lister.
Printing shawls, handkerchiefs, piece-goods, paper-hangings, and similar materials; apparatus connected therewith. (*Rollers.*)	1819	3rd Aug. 1853	John Cumming.
Apparatus for preparing the materials employed in the manufacture of certain composition fire-lights - - - - - - - - (*Cylinders.*)	1882	12th Aug. 1853	Edward Lavender. Robert Lavender.
Manufacture or treatment of gutta-percha; application thereof. (*For making inking-rollers.*) (*Communicated by Louis François Alexandre Deseille.*)	1904	13th Aug. 1853	John Henry Johnson.
Construction of iron cylinders and other like structures or articles.	2042	5th Sept. 1853	John Clare, junior.
Manufacture of printing blocks and cylinders -	2110	12th Sept. 1853	Alfred Vincent Newton.
Manufacture by machinery of tubes from leather or other suitable flexible substance, chiefly for covering the drawing-rolls of spinning machinery;—also applicable to other purposes.	2171	19th Sept. 1853	Charles Collins.
Treatment or manufacture of gutta-percha and application thereof. (*For printing-rollers.*) (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CYLINDERS, &c.—*continued.*			
Machinery or apparatus for cutting, boring, and shaping metals and other substances. (*Boring pillars and cylinders.*)	2508	31st Oct. 1853	Joseph Haley.
Machinery for crushing ores and separating therefrom gold, silver, or other metals contained therein. (*Use of rollers.*)	2564	4th Nov. 1853	William Edward Newton.
Certain improvements in apparatus or machines for forging, drawing, moulding, or forming rollers and various other articles in metal.	2615	11th Nov. 1853	John Platt.
Manufacture of bar and sheet metals; machinery connected therewith; application of such metals to various useful purposes. (*For cylinders.*)	2662	17th Nov. 1853	John Clark, junior.
Electro-magnetic engines - - - - (*Applying cylinders.*)	2677	18th Nov. 1853	James Gall, junior.
Certain improvements in marine steam-engines - (*Cylinders.*)	2706	21st Nov. 1853	William Joyce. Thomas Meacham.
Machinery for making pipes, sheets, still-worms and other articles, from that class of metal called soft metals, as lead, tin, zinc, bismuth, or alloys of soft metals that are capable of being forced out of metal-receivers or chambers through dies, cores &c. (*Press cylinders.*)	2784	30th Nov. 1853	Edward Keating Davis.
Machines for producing shoddy from woven fabrics, and for sorting the fibres of fibrous materials. (*Making the picking cylinder.*)	2858	9th Dec. 1853	Jean Baptiste Edouard Rüttre.
DENTISTRY.			
Manufacture of artificial teeth and gums - - (*Communicated by John Allen.*)	2386	15th Oct. 1853	George Laurie.
Certain chemical compound or compounds applicable as a remedy or remedies for scorbutic and other affections of the human body. (*Tooth-paste.*)	2819	5th Dec. 1853	Charles William Hockaday.
DEODORIZING AND DISINFECTING.			
Deodorizing and preparing American and other resins for mixing with grease, tallows, and wax, so as to improve them by giving them a greater hardness and consistency, and rendering them less liable to be affected by change of temperature.	4	1st Jan. 1853	Junius St. John Eicke.
Deodorizing cod-liver oil; rendering it more agreeable and easier to use either by itself or mixed, so as to be capable of being administered in larger quantities and with greater success.	365	11th Feb. 1853	Sir James Murray, Knt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DEODORIZING, &c.—*continued.*			
Apparatus for the distillation of resin oil, and for an improved method of bleaching and deodorizing the same during the process of manufacture.	483	25th Feb. 1853	Frederick Goodell.
Deodorizing sewage water and cesspools - -	581	8th March 1853	Jacques Francisque Pinel.
Preserving or preventing decomposition in vegetable and animal substances and matters. (*Deodorizing fecal matters.*)	740	28th March 1853	George Edward Dering.
Applying to illuminating the extract of bituminous products of coal, peat, and lignites; rectifying and depurating the essences and greasy matter from coal. (*Deodorizing coal oils.*)	770	31st March 1853	William Augustus Pascal Aymard.
Treating certain oily matters; manufacture of oil -	776	1st April 1853	George Fergusson Wilson.
Treating certain greasy matters; manufacture of candles.	784	1st April 1853	George Fergusson Wilson.
Disinfecting sewage or other feted matters; absorbing noxious gaseous exhalations.	1252	20th May 1853	Thomas Isaac Dimsdale.
Disinfecting sewers and other drains; converting the contents thereof to useful purposes.	1511	20th June 1853	Allan Macpherson.
Preparation of a black powder from coal - -	1900	13th Aug. 1853	John Gwynne.
Distillation and purification of resin oil - -	1920	16th Aug. 1853	Alfred Vincent Newton.
Improvements applicable to ventilation and other purposes.	1925	17th Aug. 1853	Thomas Kirkwood.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Mons. Guillaume Louis Edouard Buras.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Purification of gas; treatment of the material used in such purification.	1964	23rd Aug. 1853	William Mann.
Mode of treating waterproof fabrics - - (*Deodorizing.*)	2493	27th Oct. 1853	Joseph Gurney.
A certain composition for the preservation of the dead.	2581	7th Nov. 1853	Marino Louis Joseph Christophe Vincent Falconi.
Preparing solvents for india-rubber and gutta-percha; rendering waterproof fabrics free from odour.	2648	15th Nov. 1853	Joseph Fry.
Use and preparation of certain solid and liquid substances for the defecation, purification, and decolourization of saccharine juices and syrups or solutions, and for neutralizing, decomposing, and absorbing noxious and fetid gases.	2693	19th Nov. 1853	Thomas Isaac Dimsdale.
Disinfecting sewers or other drains or depositories of fetid matters or gases; converting the contents thereof to useful purposes.	2876	10th Dec. 1853	Allan Macpherson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DISHES, PLATES, SALVERS.			
Mode of applying and combining ornamented glass in the manufacture of useful and ornamental articles. (*Desert dishes and plates.*)	265	31st Jan. 1853	John Pinkerton.
Apparatus for serving oysters and other shell-fish.	619	11th March 1853	Moses Poole.
Improved plate-warmer - - - -	1841	6th Aug. 1853	Richard Bartholomew Martin.
DISTILLING AND RECTIFYING.			
I.—Vegetable Substances, as Grain, Wood, &c. (*for making Spirits, Acids, and Vinegar.*)			
Process of and apparatus for distilling certain vegetable matters &c.	174	24th Jan. 1853	David Clovis Knab.
Treating fermentable liquors; machinery or apparatus used therein.	384	14th Feb. 1853	Jean Antoine Gervais.
Treating corn or grain and obtaining products therefrom.	428	18th Feb. 1853	Henry Noad.
Production of spirit; stills and apparatus employed therein	468	24th Feb. 1853	Charles Flude.
Rolling and shaping malleable metals - (*Applicable for copper still bottoms.*)	701	22nd March 1853	William Johnson.
Apparatus applicable to evaporation and distillation	795	4th April 1853	Joseph Palin.
Improvements in distillation; apparatus connected therewith;—also applicable to other purposes in which substances are to be treated by the assistance of a vacuum - - - -	1018	27th April 1853	Joseph Palin. Robert William Sievier.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids.	1363	3rd June 1853	Ferdinand Louis Gossart.
A new distilling-apparatus - - -	1531	23rd June 1853	Peter Armand le Comte de Fontainemoreau.
Apparatus for consuming smoke - - -	1790	1st Aug. 1853	John Gray.
Improvements in evaporating - - -	1895	13th Aug. 1853	Frederick Lipscombe.
Distilling - - - - - -	2005	30th Aug. 1853	John Bald. Charles Maitland.
Apparatus for heating water or other liquids -	2207	24th Sept. 1853	Charles Maitland. William Gorrie.
Manufacture of artificial vinegar - - -	2224	28th Sept. 1853	Joseph Fermont Van Waesberghe.
Carbonizing and distilling peat, coal, wood, and other animal, vegetable, and mineral substances.	2435	21st Oct. 1853	Jean François Felix Challeton.
Bath for heating and distilling - - -	2535	2nd Nov. 1853	Frederick Albert Gatty.
Machinery or apparatus for mashing malt -	2614	11th Nov. 1853	William Steel.
Machinery for making still-worms and other articles from that class of metals called soft metals, as lead, tin, zinc, bismuth, or alloys of soft metals that are capable of being forced out of metal-receivers or chambers through dies, cores &c,	2784	30th Nov. 1853	Edward Keating Davis.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DISTILLING, &c.—*continued.*			
Extracting and treating the juice of beetroot and other vegetables.	2855	8th Dec. 1853	Philippe Joseph Toussaint Bordone.
Distillation of organic substances; obtaining products therefrom. (*Distilling peat.*)	2868	9th Dec. 1853	John Chisholm.
Purifying spirit - - - - -	2871	9th Dec. 1853	William Schaeffer.
XI.—Oleaginous Substances.			
Treatment of oleaginous, fatty, or gelatinous substances, for purifying, decolourizing, compounding, or clarifying the same.	377	12th Feb. 1853	William Pidding.
Treating certain oily matters; manufacture of oil -	776	1st April 1853	George Fergusson Wilson.
Distillation of fatty and oily matters - -	1538	24th June 1853	John Webster.
Manufacture of oils - - - -	1897	13th Aug. 1853	John Perkins.
Treatment of fatty and oily matters to render them suitable for the manufacture of candles.	2099	10th Sept. 1853	John Webster.
Distilling fatty and oily matters - - -	2179	20th Sept. 1853	Aristide Michel Servan.
XII.—Bituminous and Organic Substances.			
Method of heating coal and bituminous substances; treatment of their volatile products.	92	13th Jan. 1853	William Brown.
Process of and apparatus for distilling certain mineral matters; also animal bones and flesh.	174	24th Jan. 1853	David Clovis Knab.
Treatment of certain bituminous mineral substances; obtaining products therefrom.	307	4th Feb. 1853	John Perkins.
Apparatus for the distillation of resin oil; method of bleaching and deodorizing the same during the process of manufacture.	483	25th Feb. 1853	Frederick Goodell.
Manufacture of lubricating oil; mode of applying such oil to the purposes of lubrication. (*From coal tar.*)	677	18th March 1853	George Rose.
Applying to illuminating the extract of bituminous products of coal, peat, and lignites; rectifying and depurating the essences and greasy matter from coal.	770	31st March 1853	William Augustus Pascal Aymard.
Preparing oils; apparatus for burning the same - (*Obtained by distillation.*)	974	22nd April 1853	Cyprien Marie Tessie du Motay.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids.	1363	3rd June 1853	Ferdinand Louis Gossart.
Apparatus for manufacturing resin oil - -	1556	27th June 1853	Alfred Vincent Newton.
Treatment of certain oils - - - - (*Mineral oils.*)	1601	5th July 1853	John Fall.
Means of treating and preparing certain tar or naphtha and applying products thereof.	1748	25th July 1853	Warren de la Rue.
Manufacture of oils - - - - (*Eupion oils.*)	1897	13th Aug. 1853	John Perkins.
Distillation and purification of resin oil - -	1920	16th Aug. 1853	Alfred Vincent Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DISTILLING, &c.—*continued.*			
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Paraffine oil.*) (*Communicated by Mons. Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Manufacture of certain mineral oils and paraffine -	1953	22nd Aug. 1853	Auguste Edouard Loradoux Bellford.
Mode of obtaining volatile products from bituminous coals and other bituminous substances.	1957	23rd Aug. 1853	William Brown.
Distillation of turpentine and other resinous substances and their products.	2144	15th Sept. 1853	Thomas William Keates.
Treatment of lignite or wood-coal; obtaining various useful products therefrom.	2343	12th Oct. 1853	Edme Jules Maumené.
Carbonizing and distilling coal and other mineral, also animal substances.	2435	21st Oct. 1853	Jean François Felix Challeton.
Bath for heating and distilling - - - (*Coal tar.*)	2535	2nd Nov. 1853	Frederick Albert Gatty.
Preparing solvents for india-rubber and gutta-percha; rendering waterproof fabrics free from odour.	2643	15th Nov. 1853	Joseph Fry.
Apparatus for subjecting substances to the action of heat, for subjecting such substances to the process of distillation &c.	2827	5th Dec. 1853	Edward Lavender.
Distillation of organic substances; obtaining products therefrom.	2868	9th Dec. 1853	John Chisholm.
Manufacture of liquid hydro-carbons and paraffine -	2958	20th Dec. 1853	Paul Wagenmann.
Improvements in the treatment of naphthas and other volatile hydro-carbons, and in the application of the same.	2997	27th Dec. 1853	Frederick Crace Calvert.
See also "GAS."			
DIVING AND DIVING-APPAREL.			
Construction of diving helmet - - -	63	10th Jan. 1853	John Deane.
Diving-bells and apparatus to be used in connection therewith.	231	29th Jan. 1853	Richard Archibald Brooman.
Construction of vessels to be used chiefly at various depths under the surface of the water; machinery or apparatus connected therewith for propelling, balancing, and steering the same, and for carrying on operations of various kinds on or under the surface of the water from within, upon objects without such vessels.	1261	25th May 1853	William Bauer.
Apparatus for sustaining bodies in the water - - (*Buoyant dress.*) (*Communicated by Jacques Lefevre.*)	2429	21st Oct. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DOCKS, JETTIES, BREAKWATERS, LOCKS AND LOCK-GATES; SUBMARINE WORKS.			
Sluices and lock-gates - - - -	88	12th Jan. 1853	Frederick Lawrence. Alfred Lawrence.
Diving-bells and apparatus to be used in connection therewith. (*Moveable coffer-dam.*)	231	29th Jan. 1853	Richard Archibald Brooman.
Mode of constructing certain works applicable to docks, harbours, breakwaters, sea-walls, embankments, submarine foundations, and other useful purposes.	247	31st Jan. 1853	Samuel Perkes.
Giving elasticity to certain structures and parts thereof. (*Sea-walls.*)	270	1st Feb. 1853	Thomas Charles Clarkson.
Construction of vessels to be used chiefly at various depths under the surface of the water; machinery or apparatus connected therewith for propelling, balancing, and steering the same, and for carrying on operations of various kinds on or under the surface of the water from within, upon objects without such vessels. (*Useful for submarine works.*)	1281	25th May 1853	William Bauer.
Floating breakwaters - - - -	1622	7th July 1853	Christopher Vaux.
Building or forming structures under water or below the surface of the ground.	1838	6th Aug. 1853	John Hughes.
Improvements in breakwaters - - -	2026	1st Sept. 1853	John Macintosh.
Constructing piers and foundations under water -	2233	29th Sept. 1853	Thomas William Kennard.
Preparation of wood as a substitute for copper and other metals in pier-building &c.	2323	11th Oct. 1853	Henry Kemp.
Excavating and dredging machine - - -	2801	2nd Dec. 1853	Arthur Wellington Callen.
DOORS, GATES, SHUTTERS.			
Manufacture of ornaments for lamps, chandeliers, and architectural purposes. (*Mouldings and frames for doors.*)	10	3rd Jan. 1853	David Hulett.
Ornamenting walls, ceilings, and other surfaces - (*As doors and cabinets.*)	144	20th Jan. 1853	William Riddle.
Securing carriage-gates, doors, shutters &c. -	228	29th Jan. 1853	Thomas Wood Wilson.
Mode of applying and combining ornamented glass in the manufacture of useful and ornamental articles. (*Finger-plates for doors.*)	265	31st Jan. 1853	John Pinkerton.
Manufacture of knobs for doors and other like uses; partly applicable to the manfacture of certain articles of earthenware - - - - (*Handles.*)	320	5th Feb. 1853	John Whitehouse, senior. John Whitehouse, junior.
Certain improvements applicable to closing doors -	417	17th Feb. 1853	David Cochrane.
Revolving shutters - - - -	1246	20th May 1853	St. Thomas Baker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DOORS, &c.—*continued.*			
Raising and lowering shutters and similar appendages.	1279	25th May 1853	Frederick Russell.
Improvements in shutters - - -	1284	25th May 1853	Pierre Trossaert Bundervoet.
Mechanism for fastening and unfastening doors, applicable especially to the doors of carriages.	1301	26th May 1853	John Nurse.
Window-shutters and apparatus connected therewith.	1644	9th July 1853	William Skinner.
Depositing metals or alloys of metals - - (*Knobs for doors.*)	1777	29th July 1853	William Edward Newton.
Manufacture of a composition resembling papier-mâché and carton-pierre, applicable to the same purposes to which papier-mâché and carton-pierre are applied;—partly applicable to the construction of ships and boats, and roofing. (*Also doors and shutters.*)	1804	2nd Aug. 1853	William Henry Clarke.
Combination or combinations of materials suitable for buildings and other structures, and parts thereof; machinery for producing the same. (*Doors.*)	1888	12th Aug. 1853	William Littell Tizard.
Raising and lowering various kinds of window-blinds, opening and closing window and other curtains;—applicable to the closing of doors.	1944	20th Aug. 1853	James Kimberley.
Window-sashes and shutters - - -	2031	2nd Sept. 1853	James Pigott Pritchett, the younger.
Shaping metals - - - - - - (*Door-handles.*)	2229	29th Sept. 1853	John Phillips.
Revolving shutters and other closures for portable and other buildings - - - -	2341	12th Oct. 1853	Patrick Clark. Alexander Clark.
Means for preventing the fraudulent abstraction of property. (*Doors.*)	2587	7th Nov. 1853	Alfred Vincent Newton.
Construction of window-shutters;—also applicable as an additional security for doors and other similar openings - - - - -	3013	28th Dec. 1853	Thomas Phillips. Samuel Phillips.
Metallic revolving or winding shutters - - (*Communicated by Mr. Phillips.*)	3016	29th Dec. 1853	Mary Phillips.
DRAINING MINES AND LAND; MAKING AGRICULTURAL DRAINS.			
Machinery for making drains in land - -	168	22nd Jan. 1853	Joseph Paul.
Machinery or apparatus for digging, excavating, or removing earth. (*For cutting ditches or drains.*)	342	9th Feb. 1853	William Edward Newton.
Method of raising water and other materials from mines.	672	18th March 1853	George Rock Lucas.
Machinery or apparatus for effecting agricultural operations. (*Cutting drains.*)	1151	10th May 1853	John Henry Johnson.
Machinery or apparatus for digging, excavating, and removing earth. (*For making ditches or drains.*)	1697	15th July 1853	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRAINING MINES, &c.—*continued.*			
Machinery for digging, breaking, and trenching land	1980	25th Aug. 1853	Richard Archibald Brooman.
Steam machinery and pumps for lifting water from mines and other places - - - -	2573	5th Nov. 1853	Charles Carr. William Kyle Horsley.
Draining land - - - - - -	2727	23rd Nov. 1853	Edward Wilkins.
An improved hydraulic machine - - - (*For draining land.*)	2923	16th Dec. 1853	Alphonse Médail.
For Drain-tiles—*see* "BRICKS, &c." For Drain-pipes—*see* "PIPES, &c."			
DRAWING, TRACING, COPYING, MODELLING.			
A new composition of different metals or metallic substances.	35	6th Jan. 1853	Edme Augustin Chameroy.
Means of copying or reproducing models or figures in marble, stone, ivory, or other substances.	61	10th Jan. 1853	Antoine Hiron.
Sepulchral and other commemorative monuments -	363	10th Feb. 1853	William Potts.
Portable sketching-apparatus for artists - -	695	21st March 1853	John Brett.
Machinery for cutting, carving, and engraving wood, stone, metal, and other suitable materials.	856	9th April 1853	George Searby.
Ornamenting surfaces or fabrics applicable to various useful purposes, such as for covers of furniture, imitation tapestry, carpets, or hangings. (*Drawing outlines.*)	857	9th April 1853	Herbert Taylor.
Manufacture or treatment of gutta-percha; application thereof. (*Communicated by Louis François Alexandre Deseille.*)	1904	13th Aug. 1853	John Henry Johnson.
Application of the processes of lithographic and zincographic printing of words, patterns, designs, and marks, on metal, glass, wood, and other hard and unyielding substances, in sheets, slabs, or flat pieces, with or without the intervention of paper or other flexible material - - -	2115	13th Sept. 1853	Charles Frederick Adams. William Gee. George Davis.
Machinery for carving, cutting, chiselling, and engraving. (*Copying models.*)	2245	1st Oct. 1853	Thomas Woodcock.
Treatment or manufacture of gutta-percha; application thereof.	2430	21st Oct. 1853	John Henry Johnson.
An invention for electric telegraph purposes, being an improved printing and signal electric telegraph, with electric alarm attached - -	2345	12th Oct. 1853	Henry Mapple. Daniel Moore Mapple.
Combining gelatine with certain other substances and colouring the same so as to produce various objects capable of resisting atmospheric influences.	2762	26th Nov. 1853	Louis Cornides.
Electric telegraphs - - - - (*Recording on paper.*)	2846	8th Dec. 1853	William Thomas Henley.
Improvements in effecting telegraphic communications. (*Tracing communications.*)	2885	12th Dec. 1853	Edward Orange Wildman Whitehouse.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRYING, WRINGING, AND STRETCHING.			
Manufacturing and treating caoutchouc - - (*Stretching caoutchouc thread.*)	22	5th Jan. 1853	Gustave Eugène Michel Gérard.
Method of drying wheat, pulse, seeds, and other grain.	32	6th Jan. 1853	Edward Hutchinson.
Machinery to be used in the process of drying, seasoning &c. grain, including certain vegetable and other substances.	97	14th Jan. 1853	Joseph Lillie.
Manufacture of batting or wadding - - -	114	17th Jan. 1853	Auguste Edouard Loradoux Bellford.
Construction of boilers and apparatus connected therewith. (*Drying steam.*)	272	1st Feb. 1853	Joshua Murgatroyd.
Apparatus to be employed for the purposes of drying.	313	4th Feb. 1853	William Walker.
Treating fibrous substances - - -	281	14th Feb. 1853	Peter Armand le Comte de Fontainemoreau.
Machinery or apparatus for stretching woven fabrics	409	16th Feb. 1853	Wright Jones.
Drying and heating certain substances or articles -	434	19th Feb. 1853	Charles Nightingale.
Improvements applicable to steam-pipes used for drying &c.	437	21st Feb. 1853	Wright Jones.
Drying or preparation of malt, meal, seeds, corn, and other grain.	471	24th Feb. 1853	James Lawrence.
Drying cigars - - - - - -	503	28th Feb. 1853	Peter Armand le Comte de Fontainemoreau.
Drying yarns - - - - - -	526	2nd March 1853	Marcel Vetillart.
Stretching fabrics - - - - -	561	5th March 1853	John Hirst. William Mitchell.
Cleansing and separating ores and coal - - (*Drying.*)	582	8th March 1853	Nicolas Schmitt.
Treatment of corn and other grains, and more especially in all that concerns washing, drying, grinding, curing, and preserving them - -	625	12th March 1853	Nicolas Auguste Eugène Millon. Leopold Mouren.
Drying bricks and such other articles as are or may be made of clay - - - -	649	16th March 1853	George Knight. John Heritage.
Method of preparing, treating, and finishing cut-piled or raised fustians and other similar goods or fabrics; machinery or apparatus connected therewith. (*Drying and stretching.*)	732	26th March 1853	James Worrall, junior.
Boots, shoes, and clogs; machinery or apparatus and materials connected therewith. (*Drying by heated air or steam.*)	757	29th March 1853	Julian Bernard.
Method of preparing, treating, and finishing certain textile fabrics called cords, thicksetts, velveteens, and beaverteens. (*Drying and stretching.*)	768	30th March 1853	James Worrall, junior.
Drying malt - - - - - -	801	4th April 1853	William Walker.
Manufacture of glass and porcelain - - -	803	4th April 1853	Francis Steigewald.
Manufacture of alkali - - - - -	887	13th April 1853	George Elliot. William Russell.
Machinery for preparing flax, hemp, and other vegetable fibrous substances, for scutching or other manufacturing processes.	926	16th April 1853	George Albemarle Cator.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRYING, &c.—*continued.*			
Disengaging silk of its gum	937	18th April 1853	Jean Jules Gonin.
Means of conveying and distributing or separating granular and other substances. (*Drying grain.*)	1040	29th April 1853	Robert Davison. James Scott Horrocks.
Machinery for cutting or chopping roots, plants, or other similar substances. (*For drying.*)	1041	29th April 1853	Thomas Collins Banfield.
Drying and preserving vegetable or other saccharine plants.	1042	29th April 1853	Thomas Collins Banfield.
Stretching, dressing, and finishing cotton and linen yarns or threads; machinery or apparatus connected therewith.	1061	2nd May 1853	George Murton. William Hatton Langshaw.
Treatment of fibrous and other substances for the purpose of ascertaining the quantity of moisture contained therein.	1098	4th May 1853	William Edward Newton.
Improvements in furnaces	1100	5th May 1853	William Moore.
Treatment or manufacture of peat and other substances to be used as fuel.	1117	6th May 1853	James Egleson Anderson Gwynne.
Apparatus for drying and finishing woven fabrics	1149	10th May 1853	George Robertson. Alexander Robertson.
Improvements in pressing and in extracting fluids	1177	12th May 1853	Julian Bernard. Edward Taylor Bellhouse.
Drying bricks, peats and other articles (*Also grain.*)	1238	18th May 1853	John Barsham.
Machinery for treating the fibres of flax, hemp, china-grass, and other analogous substances, preparatory to spinning.	1302	26th May 1853	Julius Augustus Roth.
Fans, blasts, or blowing apparatus	1379	4th June 1853	Joseph Burch.
Drying grass and other crops	1484	18th June 1853	Henry Saunders.
Apparatus for roasting or desiccating coffee, cocoa, and chicory.	1496	18th June 1853	George Robinson.
Preparing and finishing certain worsted yarns; apparatus employed therein.	1501	20th June 1853	Robert Midgley.
Steam-boilers (*Drying steam.*)	1561	28th June 1853	Auguste Edouard Loradoux Bellford.
Treatment or manufacture of ornamental fabrics (*Stretching.*)	1610	6th July 1853	John Hood. William Hood.
Preparing for weaving wet-spun yarns of flax and tow	1662	13th July 1853	Abraham Walter Craig. Daniel Foster. Thomas Valentine.
Machinery and apparatus for expressing liquid or moisture from substances	1669	14th July 1853	William Needham. James Kite.
Application of heat for baking and drying purposes; generation of steam.	1848	8th Aug. 1853	William Hickson.
Preparation or composition to be applied to pigments for the purpose of the facilitating the drying of the same.	1864	10th Aug. 1853	William Edward Newton.
Preparation of a black powder from coal; application thereof to the manufacture of paints, blacking, and various other purposes.	1900	13th Aug. 1853	John Gwynne.
Preparation of beet-root for the manufacture of sugar;—applicable to other purposes (*Drying.*)	1902	13th Aug. 1853	John Gwynne. James Egleson Anderson Gwynne.
Treating fibrous substances	1923	17th Aug. 1853	Felix Alexandre Victor Delarbre.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRYING, &c.—*continued.*			
Machinery for printing textile fabrics, oil-cloths, leather, paper-hangings, and other similar fabrics or materials. (*Also drying.*)	1936	18th Aug. 1853	William Curtain.
Improvements in and applicable to machines for printing fabrics. (*And drying the web.*)	2126	14th Sept. 1853	John Wilson.
Treating, stretching, or finishing textile fabrics; machinery or apparatus for effecting the same - (*And drying.*)	2217	27th Sept. 1853	Isaac Bury. William Green.
Manufacture of pulp for paper-makers - -	2219	28th Sept. 1853	Moses Poole.
Machinery for preparing linen yarn - - -	2248	1st Oct. 1853	Samuel Murland.
Drying grain, flour, timber, fruit, vegetables, and other substances.	2373	14th Oct. 1853	Auguste Edouard Loradoux Bellford.
Bleaching and drying of fibres or fibrous materials; —partly applicable to the drying of woven and other textile manufactures.	2426	20th Oct. 1853	Julius Augustus Roth.
An elastic spring contained in a cylindric tube or tubular case, the lid of which moves up and down according to the pressure. (*For presses used in drying hanks.*)	2443	22nd Oct. 1853	Jean François Mermet.
Manufacture of veneers; machinery and apparatus connected therewith - - - - -	2480	26th Oct. 1853	Thomas Dunn. William Gough.
Improvements in centrifugal machines - -	2582	7th Nov. 1853	Thomas Wood.
Machinery or apparatus for wringing or twisting, glossing, stretching, and drying silk, cotton-wool, flax, and other fibrous materials - - -	2675	18th Nov. 1853	Charles Fernihough. James Fernihough.
Ventilating drying-stoves - - - - -	2676	18th Nov. 1853	Thomas Holmes.
Apparatus for drying clay - - - -	2696	19th Nov. 1853	Henry Daniell.
Manufacture of fuel; its preparation &c. - -	2817	3rd Dec. 1853	John Gwynne. James EglesonAnderson Gwynne.
Machinery or apparatus for stretching textile fabrics as they are wound into laps or rolls after the processes of bleaching and dyeing, or operations connected therewith.	2935	16th Dec. 1853	Henry Thomson.
Construction of certain machinery and apparatus for the manufacture of bricks and tiles. (*Drying them, also earthenware and timber.*)	2969	21st Dec. 1853	Thomas Vincent Lee.
Apparatus for washing and bleaching - - (*Also for partially drying.*)	2988	24th Dec. 1853	Joseph Gaultier.
DYEING AND STAINING FABRICS, YARNS, AND MATERIALS.			
Machinery to be used in dyeing &c. yarns and fabrics.	11	3rd Jan. 1853	John Bleackley.
Bleaching and dyeing - - - - -	214	28th Jan. 1853	Louis Christian Koeffler.
Method of producing a certain colour or colours on woven or textile fabrics and yarns; machinery or apparatus connected therewith.	223	29th Jan. 1853	Harold Potter.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DYEING, &c.—*continued.*			
Improvements in dyeing - - - - - (*Silk.*)	638	14th March 1853	John Henry Johnson.
Preserving or preventing decomposition in vegetable and animal substances and matters. (*Preparing fabrics for dyeing.*)	740	28th March 1853	George Edward Dering.
An improvement in dyeing - - - - -	764	30th March 1853	Robert Dalglish.
Method of preparing, treating, and finishing certain textile fabrics called cords, thicksets, velveteens, and beaverteens.	768	30th March 1853	James Worrall, junior.
Machinery or apparatus for printing or staining woven fabrics and paper - - - - -	1031	28th April 1853	James Berry. Thomas Booth.
Printing or dyeing woven or textile fabrics; manufacturing certain substances to be used in the arts or processes of dyeing and printing.	1193	14th May 1853	James Higgin.
Dyeing and printing silk, wool, and other animal fibres.	1317	28th May 1853	François Francillon.
Treating or preparing yarns or threads - -	1330	30th May 1853	William Green.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids.	1363	3rd June 1853	Ferdinand Louis Gossart.
Apparatus for dyeing &c. fustians, beaverteens, cantoons, satteens, twills, and other textile fabrics.	1493	18th June 1853	James Worrall, junior.
Colouring paper on the surface - - -	1500	20th June 1853	John Paul.
Impregnating, saturating, or coating threads, yarns, and fabrics with metal—"Metallic dyeing." (*Communicated by Charles Depoully.*)	1593	2nd July 1853	Richard Archibald Brooman.
Dyeing or colouring textile fabrics and materials; machinery or apparatus connected therewith. (*Communicated by Emile Weber.*)	1903	13th Aug. 1853	John Henry Johnson.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Mons. Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Dyeing and ornamenting skins, fabrics, and other substances.	1954	22nd Aug. 1853	Victor Emile Warmont.
Process of dyeing;—partly applicable to bleaching -	2012	30th Aug. 1853	Alfred Vincent Newton.
Machinery or apparatus for dunging, dyeing &c. woven fabrics.	2038	3rd Sept. 1853	Albert Nagles.
Treating, stretching, or finishing textile fabrics; machinery or apparatus for effecting the same - (*Imparting colour to.*)	2217	27th Sept. 1853	Isaac Bury. William Green.
Method of dyeing fustians and other textile fabrics; machinery or apparatus connected therewith.	2329	11th Oct. 1853	James Worrall, junior.
Manufacture of carpets - - - - - (*Dyeing warps.*)	2470	26th Oct. 1853	George Gower Woodward.
Improvements in dyeing - - - - -	2479	26th Oct. 1853	Romain Joly.
Manufacture of coloured and ornamented fabrics - (*Dyeing or clouding yarn.*)	2494	27th Oct. 1853	Richard Archibald Brooman.
Fixing colours on yarns and cloths - - -	2654	16th Nov. 1853	John Ronald.
Printing and dyeing cotton-wool, silk, and other fibrous substances - - - - -	2896	14th Dec. 1853	Frederick Albert Gatty. Emile Kopp.
Improvements in dyeing - - - - - (*Communicated by Monsieur Bellancourt.*)	2927	16th Dec. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DYEING, &c.—*continued.*			
Process of bleaching vegetable fibrous substances - (*Preparing for dyeing.*) (*Communicated by Charles Custer.*)	2948	19th Dec. 1853	John Tribelhorn. Dr. Pompejus Bolley.
Improvements in tanning - - - -	2960	20th Dec. 1853	Emile Victor Felix Lemaire.
Dyeing and cleansing cotton, silk, and other fabrics	3009	28th Dec. 1853	John Barnes.
DYES, DYEWOODS, PRINTING-COLOURS AND MORDANTS.			
Certain colouring composition for dyeing tissues or stuffs of silk and cotton.	161	22nd Jan. 1853	Louis Jules Joseph Malegue.
Mordants or dyeing materials;—partly applicable to the manufacture of a polishing powder.	500	28th Feb. 1853	Martyn John Roberts.
Printing or producing colours on textile fabrics - (*And preparing a mordant.*)	823	6th April 1853	Frederick Albert Gatty.
Improvements in distillation; apparatus connected therewith;—also applicable to other purposes in which substances are to be treated by the assistance of a vacuum - - - - - (*Obtaining extracts.*)	1018	27th April 1853	Joseph Palin. Robert William Sievier.
Manufacturing certain substances to be used in the arts or processes of dyeing and printing.	1193	14th May 1853	James Higgin.
Obtaining infusions and decoctions; vessels or apparatus employed therein. (*Extracting.*)	1481	17th June 1853	John Piddington.
Manufacture of certain colouring matter to be used in dyeing and printing.	1549	25th June 1853	John Emanuel Lightfoot.
Mode of heating madder and munjeet by which the quality of the colouring matter contained in those substances is greatly improved, and its application to dyeing and printing much facilitated.	1627	8th July 1853	William Maddick.
Application of the extract of the pine and other trees of the fir tribe to dyeing and colouring purposes. (*Communicated by Nicolas Philibert Guinnon.*)	2199	23rd Sept. 1853	Auguste Edouard Loradoux Bellford.
Preparation or thickening of colouring matters for printing.	2389	17th Oct. 1853	William Roy, senior.
Printing or producing colours on textile fabrics - (*Preparing a mordant.*)	2440	21st Oct. 1853	Frederick Albert Gatty.
Ornamenting the materials of and articles manufactured in pottery, as bricks, tiles, slabs. &c., also glass, slate, stone, and other plastic substances - (*A printing compound.*)	2532	1st Nov. 1853	Thomas Sanders Bale. Daniel Lucas.
Method of purifying and concentrating the colouring matter of madder, munjeet, spent madder, or any preparations thereof, however they may be made.	2776	29th Nov. 1853	Edward Joseph Hughes.
Manufacture of an artificial tartaric acid; application of the same to useful purposes. (*Using the washing liquor as a mordant.*)	2831	6th Dec. 1853	Auguste Edouard Loradoux Bellford.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DYES, &c.—*continued.*			
Printing and dyeing cotton-wool, silk, and other fibrous substances - - - - - (*Resists and discharges.*)	2896	14th Dec. 1853	Frederick Albert Gatty. Emile Kopp.
Improvements in dyeing - - - - (*Mordant.*) (*Communicated by Monsieur Bellencourt.*)	2927	16th Dec. 1853	John Henry Johnson.
Process of bleaching vegetable fibrous substances - (*Communicated by Charles Custer.*)	2948	19th Dec. 1853	John Tribelhorn. Dr. Pompejus Bolley.
Dyeing and cleansing cotton, silk, and other fabrics (*Compound in lieu of dung.*)	3009	28th Dec. 1853	John Barnes.
EARTHENWARE; PREPARING CLAY; POTTERY GLAZES.			
Manufacture of a [illegible] substance, and its application alone or in combination with minerals, earths, and mineral substances to various useful purposes in the arts, and for certain other new applications of known mineral substances. (Making "parian" from mineral porcelain, &c.	7	1st Jan. 1853	Joseph Brough.
Method of ornamenting articles of earthenware &c. -	193	25th Jan. 1853	Amédée François Rémond.
Preparing mineral materials to be used in the manufacture of fire bricks and other purposes.	197	26th Jan. 1853	Nicolas Francisque Ador.
[illegible] the surface of other similar materials -	254	31st Jan. 1853	Thomas Lightfoot.
[illegible] glass and other hard or bright surfaces with gold.	361	16th Feb. 1853	Charles Breese.
[illegible] to the working and applying current electricity [illegible] applicable for obtaining and treating certain chemical products resulting from electrolytic action. (Electro metallurgy.)	634	14th March 1853	William Edwards Staite.
Manufacture of glass and [illegible] - -	883	4th April 1853	Francis Stiegewald.
Manufacture of ornamental surfaces of porcelain and similar materials. (Lace or fancy work.)	883	6th April 1853	William Johnson.
[illegible] mould and moulding or forming other materials.	883	25th April 1853	Julius Bernard.
Manufacture of artificial [illegible] - -	1084	26th April 1853	Moses Poole.
Manufacture of certain compounds containing phosphorus and [illegible] (A certain process.)	1216	7th May 1853	Thomas Richardson.
[illegible] - - - - -	1885	26th July 1853	Henri Joseph d'Heurt.
[illegible] - -	1893	28th July 1853	Francis Wareham.
[illegible] - -	1894	28th July 1853	Thomas Grimsley.
[illegible] - -	1897	29th July 1853	William Cornelius.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
EARTHENWARE, &c.—*continued.*			
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Applying the gas for baking earthenware.*) (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Mode of manufacturing china and earthenware articles on the lathe.	2139	14th Sept. 1853	William Nash.
Manufacture and ornamenting of china, porcelain, and pottery wares. (*Depositing metal by the electrotype process.*)	2292	7th Oct. 1853	William Ellis.
Improvements applicable to the kneading or beating of clay, loam, or other plastic materials.	2566	4th Nov. 1853	Henry Pratt.
Apparatus for drying clay - - - -	2696	19th Nov. 1853	Henry Daniell.
For Pottery Kilns, *see* "OVENS, &c." *See also* "FURNACES."			
ELECTRICITY AND GALVANISM; ELECTRO-PLATING.			
I.—Electric and Galvanic Machines and Batteries; Electric Currents; Lightning Conductors.			
Medical portative electro-galvanic apparatus - -	23	5th Jan. 1853	Gustave Paul de l'Huynes.
Galvanic batteries - - - - -	169	22nd Jan. 1853	Peter Hubert Desvignes. Francis Xavier Kukla.
Galvanic batteries - - - - -	339	8th Feb. 1853	Thomas Allan.
Electric telegraphs; apparatus connected therewith	565	7th March 1853	Henry Mapple.
A hydro-dynamic battery or new electro-magnetic apparatus, which with its products is applicable to the production of motive-power, light, and heat.	575	7th March 1853	Augustino Carosio.
Construction of portable voltaic batteries - -	631	12th March 1853	James Murdoch.
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electrolytic action.	634	14th March 1853	William Edwards Staite.
Improvements in galvanic batteries - -	944	19th April 1853	John Fuller.
Lightning conductors for ships and vessels -	957	20th April 1853	Sir William Snow Harris.
Galvanic or voltaic batteries - - -	1025	27th April 1853	John Filmore Kingston.
Magneto-electric machines - - -	1562	28th June 1853	Auguste Edouard Loradoux Bellford.
Magneto-electric apparatus suitable for the production of motive-power, light, and heat.	1587	1st July 1853	Edward Clarence Shepard.
Electro-magnetic apparatus, which with its products is applicable to the production of motive-power.	1671	14th July 1853	Augustino Carosio.
Mode of producing an electric current - -	1785	30th July 1853	Peter Armand le Comte de Fontainemoreau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DYES, &c.—*continued.*			
Printing and dyeing cotton-wool, silk, and other fibrous substances - - - - - (*Resists and discharges.*)	2896	14th Dec. 1853	Frederick Albert Gatty. Emile Kopp.
Improvements in dyeing - - - (*Mordant.*) (*Communicated by Monsieur Bellancourt.*)	2927	16th Dec. 1853	John Henry Johnson.
Process of bleaching vegetable fibrous substances - (*Communicated by Charles Custer.*)	2948	19th Dec. 1853	John Tribelhorn. Dr. Pompejus Bolley.
Dyeing and cleansing cotton, silk, and other fabrics (*Compound in lieu of dung.*)	3009	28th Dec. 1853	John Barnes.
EARTHENWARE; PREPARING CLAY; POTTERY GLAZES.			
Manufacture of a vitrified substance, and its application alone or in combination with mineral, earthy, and plastic substances, to various useful purposes in the arts, and for certain other new applications of known plastic substances. (*Making "opaline" from crushed porcelain, &c.*)	7	1st Jan. 1853	Joseph Brough.
Method of ornamenting articles of earthenware &c. -	183	25th Jan. 1853	Amédée François Rémond.
Preparing plastic materials to be used in the manufacture of fired wares and other purposes.	197	26th Jan. 1853	Nicolas Francisque Ador.
Glazes for pottery or other similar materials -	254	31st Jan. 1853	Thomas Lightfoot.
Ornamenting china and other hard or bright surfaces with gold.	361	10th Feb. 1853	Charles Breese.
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electro-lytic action. (*Obtaining pottery glazes.*)	634	14th March 1853	William Edwards Staite.
Manufacture of glass and porcelain - -	803	4th April 1853	Francis Stiegewald.
Production of ornamental surfaces in porcelain and similar materials. (*Parti-coloured designs.*)	828	6th April 1853	William Johnson.
Casting metals and moulding or forming other materials.	995	25th April 1853	Julian Bernard.
Manufacture of porcelain and like wares - -	1004	26th April 1853	Moses Poole.
Manufacture of certain compounds containing phosphoric acid. (*For making porcelain.*)	1208	16th May 1853	Thomas Richardson.
Manufacture of pottery - - - -	1683	15th July 1853	Henri Joseph d'Huart.
Inlaying or ornamenting earthenware vessels -	1893	12th Aug. 1853	Horatio Wareham.
Machinery for the manufacture of pottery &c. -	1926	17th Aug. 1853	Thomas Grimsley.
Gilding porcelain, glass, and such like materials -	1937	18th Aug. 1853	William Cornelius.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
EARTHENWARE, &c.—*continued.*			
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Applying the gas for baking earthenware.*) (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Mode of manufacturing china and earthenware articles on the lathe.	2139	14th Sept. 1853	William Nash.
Manufacture and ornamenting of china, porcelain, and pottery wares. (*Depositing metal by the electrotype process.*)	2292	7th Oct. 1853	William Ellis.
Improvements applicable to the kneading or beating of clay, loam, or other plastic materials.	2566	4th Nov. 1853	Henry Pratt.
Apparatus for drying clay - - - -	2696	19th Nov. 1853	Henry Daniell.
For Pottery Kilns, *see* "OVENS, &c." *See also* "FURNACES."			
ELECTRICITY AND GALVANISM; ELECTRO-PLATING.			
I.—Electric and Galvanic Machines and Batteries; Electric Currents; Lightning Conductors.			
Medical portative electro-galvanic apparatus - -	23	5th Jan. 1853	Gustave Paul de l'Huynes.
Galvanic batteries - - - - - -	169	22nd Jan. 1853	Peter Hubert Desvignes. Francis Xavier Kukla.
Galvanic batteries - - - - - -	339	8th Feb. 1853	Thomas Allan.
Electric telegraphs; apparatus connected therewith	565	7th March 1853	Henry Mapple.
A hydro-dynamic battery or new electro-magnetic apparatus, which with its products is applicable to the production of motive-power, light, and heat.	575	7th March 1853	Augustino Carosio.
Construction of portable voltaic batteries - -	631	12th March 1853	James Murdoch.
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electrolytic action.	634	14th March 1853	William Edwards Staite.
Improvements in galvanic batteries - -	944	19th April 1853	John Fuller.
Lightning conductors for ships and vessels -	957	20th April 1853	Sir William Snow Harris.
Galvanic or voltaic batteries - - -	1025	27th April 1853	John Filmore Kingston.
Magneto-electric machines - - -	1562	28th June 1853	Auguste Edouard Loradoux Bellford.
Magneto-electric apparatus suitable for the production of motive-power, light, and heat.	1587	1st July 1853	Edward Clarence Shepard.
Electro-magnetic apparatus, which with its products is applicable to the production of motive-power.	1671	14th July 1853	Augustino Carosio.
Mode of producing an electric current - -	1785	30th July 1853	Peter Armand le Comte de Fontainemoreau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ELECTRICITY, &c.—*continued.*			
Production of electricity	2003	29th Aug. 1853	Peter Armand le Comte de Fontainemoreau.
Galvanic batteries	2361	13th Oct. 1853	Charles Ludovic Augustus Meinig.
Improvements in galvanic batteries	2486	27th Oct. 1853	George Edward Dering.
Electric telegraphs	2846	8th Dec. 1853	William Thomas Henley.
Improvements in hats, caps, bonnets, and other coverings for the head. (*Introducing voltaic or galvanic currents.*)	2920	16th Dec. 1853	Walter George Whitehead.
II.—Electro-plating.			
Depositing metals or alloys of metals (*Plating wire.*)	1777	29th July 1853	William Edward Newton.
Manufacture and ornamenting or coating of articles when compounds containing india-rubber are used.	2009	30th Aug. 1853	Charles Goodyear.
Manufacture and ornamenting of china, porcelain, and pottery wares.	2292	7th Oct. 1853	William Ellis.
Improvements in mantel-pieces	2309	8th Oct. 1853	William Potts.
Deposition of metals and metallic alloys	2579	7th Nov. 1853	Henry Pershouse. Timothy Morris.
Ornamenting woven fabrics and other surfaces	2746	25th Nov. 1853	Alexander Drew.
Printing oil cloths and other fabrics (*Electrotype plates or casts.*) (*Communicated by Benjamin Underwood.*)	2836	6th Dec. 1853	John Henry Johnson.
ELECTRICITY AND GALVANISM AS APPLIED TO VARIOUS PURPOSES.			
Method of manufacturing steel and of carburizing iron	5	1st Jan. 1853	Joseph John William Watson. William Prosser.
Manufacture of gas	16	4th Jan. 1853	Edward Clarence Shepard.
Medical portative electro-galvanic apparatus (*For bracelets, belts, and trusses.*)	23	5th Jan. 1853	Gustave Paul de l'Huynes.
Illuminating buoys and beacons in harbours, roadsteads, and rivers.	31	6th Jan. 1853	William Louis Sheringham.
Obtaining motive-power	100	14th Jan. 1853	John Henry Vries.
Producing electric light	119	18th Jan. 1853	Christopher Binks.
Bleaching animal and vegetable fibrous materials	191	25th Jan. 1853	Robert William Sievier. Robert William Waithman.
Indicating time	199	26th Jan. 1853	Charles Nolet.
An improved lock or system of locks (*Fastening and unfastening.*)	229	29th Jan. 1853	Francis Whishaw.
Signalling by electricity on railway-trains and railways; appliances used therein.	303	4th Feb. 1853	David Lloyd Price.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ELECTRICITY, &c.—*continued.*			
Manufacture of spoons and forks and other similar articles for domestic use.	401	16th Feb. 1853	Job Cutler.
Safety lamps	458	23rd Feb. 1853	Reuben Plant.
A new mode of obtaining and using power by explosion of gases. (*The gases are exploded by electricity, galvanism, or magnetism.*)	515	1st March 1853	Robert Lewin Bolton.
Illuminating apparatus; production of light	570	7th March 1853	Joseph John William Watson.
Improvements in fire-arms (*Firing.*)	653	16th March 1853	Henry Richardson Fanshawe.
Mode of smelting iron and other ores	700	22nd March 1853	John Henry Johnson.
Certain instruments, apparatus, and articles for the application of electro-galvanic and magnetic action for medical purposes.	806	4th April 1853	Antoine Burq.
Obtaining motive-power by electro-magnetism	881	12th April 1853	Robert John Kaye. John Ormrod Openshaw.
Electro-voltaic apparatus (*Chains or ribbons.*)	1067	2nd May 1853	Christian Radunsky.
Taking impressions and producing printing-surfaces	1164	11th May 1853	William Bradbury. Frederick Mullett Evans.
Obtaining motive-power (*Exploding gases.*)	1248	20th May 1853	Edward Jones Schollick.
Locks and keys, partly applicable to window-sashes and doors.	1310	27th May 1853	William Henry Bentley.
Turning over the leaves of books, music, and engravings; apparatus for effecting the same. (*Communicated by Claude Desbeaux.*)	1563	28th June 1853	John Henry Johnson.
Obtaining and applying motive-power	1577	30th June 1853	Joseph Webb.
Manufacture of gas	1591	2nd July 1853	Edward Clarence Shepard.
Impregnating, saturating, or coating threads, yarns, and fabrics with metal—"Metallic dyeing." (*Communicated by Charles Depoully.*)	1593	2nd July 1853	Richard Archibald Brooman.
Improvements in carriages, scaffoldings, and ladders, which scaffoldings and ladders are used as carriages. (*And galvanizing tubes.*)	1599	4th July 1853	Marcus Davis.
Manufacture of soap and washing paste, and of the materials used therein	1641	9th July 1853	Pierre Auguste Tourniere. Louis Nicolas de Meckenheim.
Metallic pens and pen-holders (*Preventing corrosion.*)	1706	18th July 1853	Isaïe Alexandre.
Means or processes for preserving metals from corrosion.	1789	1st Aug. 1853	John Carvalho de Medeiros.
Electro-magnetic alarm apparatus to be applied to a door or window, or both, of a dwelling-house or other building, for the purpose of giving an alarm in case of an attempt to open such door or window.	1795	1st Aug. 1853	Augustus Russell Pope.
Mode of regulating the electric light	1806	2nd Aug. 1853	Peter Armand le Comte de Fontainemoreau.
Improvements in weaving (*Communicated by Chevalier Gaetano Bonnelli.*)	1892	12th Aug. 1853	Daniel Illel Picciotto.
Obtaining motive-power	1934	18th Aug. 1853	Jean Larmanjat.
Obtaining power by the aid of an electric current for motive and telegraphic purposes.	2032	2nd Sept. 1853	Augustino Carosio.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ELECTRICITY, &c.—*continued.*			
Clocks or time-keepers and parts connected therewith. (*Setting a series by an electric current.*)	2036	3rd Sept. 1853	Ebenezer Dobell.
Means of preventing accidents on railways (*Giving signals and actuating breaks.*)	2285	6th Oct. 1853	Manuel Fernandez de Castro.
Means of cutting, carving, engraving, piercing, or embossing metallic or other surfaces. (*Actuating the tool.*)	2382	15th Oct. 1853	Thomas Woodcock.
Apparatus for regulating the temperature of stoves and furnaces, and of water, air, or other fluids contained in vessels or chambers, the strength of spirituous liquors, and of chemical mixtures, and the hygrometric state of the air in buildings, rooms &c. (*Opening dampers &c. by electric currents.*)	2448	24th Oct. 1853	Henry Kraut.
Construction of globes (*Lighting the interior.*)	2457	25th Oct. 1853	Jean Baptiste Verdon.
Improvements in galvanic batteries (*Working telegraphs and clocks.*)	2486	27th Oct. 1853	George Edward Dering.
Obtaing power by electro-magnetism	2498	28th Oct. 1853	John Walker Wilkins.
Abstracting and condensing smoke arising from steam-engine and other furnaces; obtaining a supply of air for supporting the combustion of fuel in such furnaces, thereby superseding the necessity of chimney shafts and funnels. (*Driving fans.*)	2548	3rd Nov. 1853	William Wood.
Method of signalling or communicating between trains on railways	2663	17th Nov. 1853	George Dugmore. George Haywood Millward.
Communicating information or directions to persons in charge of railway trains	2664	17th Nov. 1853	Solomon Abraham. Samuel Victor Abraham.
Electro-magnetic engines	2677	18th Nov. 1853	James Gall, junior.
Improved application of magneto-electricity for driving machinery, and for neutralizing the impulsive force of machinery in motion.	2764	26th Nov. 1853	Joseph Scipion Rousselot.
Signalling and preventing collisions on railways by electrical communication.	2967	21st Dec. 1853	Charles James Farrington.
EMBOSSING; SURFACES FOR EMBOSSING; STAMPING.			
Metallic plates; producing devices or ornamental patterns thereon; apparatus and machinery to be used for such purposes	521	2nd March 1853	John Smith. William Henry Smith. Alexander Williams.
Producing plates or surfaces which may be used as printing or embossing surfaces, or as door-plates, dial or number plates, or other plates or surfaces bearing inscriptions or devices of various kinds.	796	4th April 1853	William Edward Newton.
Method of embossing and finishing woven fabrics; machinery or apparatus employed therein.	977	23rd April 1853	Frederick Tompkins.
Combining india-rubber with certain metals	1095	4th May 1853	Charles Goodyear.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
EMBOSSING, &c.—*continued.*			
Manufacture of glass (*Embossing.*)	1604	5th July 1853	George Mackay.
Machinery for embossing &c. plain and fancy woven fabrics.	1726	21st July 1853	William Thorp.
A press applicable to embossing &c.	1861	10th Aug. 1853	Alexander Prince.
Obtaining impressions from dies and other engraved and figured surfaces by stamping or pressure.	1886	12th Aug. 1853	Richard Archibald Brooman.
Means of embossing &c. metallic or other surfaces	2362	15th Oct. 1853	Thomas Woodcock.
Printing and embossing paper with a view to prevent forgery.	2387	15th Oct. 1853	Augustus Applegath.
Improvements in embossing-presses	2489	27th Oct. 1853	Henry Dolby.
Ornamenting textile fabrics	2520	1st Nov. 1853	John Bottomley.
Stamps and presses;—parts of which may be applied to other purposes	2631	14th Nov. 1853	John Singleton Copley Hill. Edwin Cottrill.
Ornamenting a certain description of textile fabric (*"Raised" cloths.*)	2842	7th Dec. 1853	Andrew Lawson Knox.
Ornamenting certain descriptions of textile fabrics (*Terry fabrics.*)	2934	16th Dec. 1853	Andrew Lawson Knox.
ENAMELLING; ENAMELS.			
Method of ornamenting articles of enamel &c.	183	25th Jan. 1853	Amédée François Rémond.
Manufacture of spoons and forks and other similar articles for domestic use.	401	16th Feb. 1853	Job Cutler.
Apparatus for producing and applying current electricity; partly applicable for obtaining and treating certain chemical products resulting from electrolytic action. (*Obtaining oxydes suitable for enamels.*)	634	14th March 1853	William Edwards Staite.
Application of porcelain and similar materials to ornamenting purposes. (*Coating iron, wood, or plaster, with enamel.*)	637	14th March 1853	John Henry Johnson.
Machinery for propelling vessels; mode of manufacturing the same. (*Enamelling the propeller blades.*)	1135	9th May 1853	John Fisher.
Improvements applicable to lanterns, lamps, lamp-shades and reflectors, for reflecting, concentrating, or diffusing light	2301	7th Oct. 1853	Francis Whitehead. William Whitehead.
Building ships and other vessels (*Sheathing.*)	2362	13th Oct. 1853	Thomas Grahame.
Certain improvements in kitchen sinks	2763	26th Nov. 1853	Thomas Chambers. John Chambers.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ENGRAVING; ETCHING.			
Method of ornamenting articles of glass, enamel, and earthenware. (*Etching.*)	183	25th Jan. 1853	Amédée François Rémond.
Machinery for making pipes and tubes - - (*Engraving the edges of the rollers.*)	560	5th March 1853	Richard Archibald Brooman.
Machinery for engraving &c. wood, stone, metal, and other suitable materials.	856	9th April 1853	George Searby.
Manufacture of geographic and other maps - -	1066	2nd May 1853	Ambroise Maurice Christophe Claude Faure.
Method of forming designs and patterns upon papier-mâché, japanned iron, glass, metal, and other surfaces. (*Etching.*)	1714	19th July 1853	Charles Breese.
Machinery or apparatus applicable to etching or engraving upon plain, cylindrical, or other surfaces.	1969	24th Aug. 1853	Thomas Foster.
Machinery for engraving, &c. - - -	2245	1st Oct. 1853	Thomas Woodcock.
Means of engraving &c. metallic or other surfaces -	2382	15th Oct. 1853	Thomas Woodcock.
Treatment or manufacture of gutta-percha, and application thereof. (*Transferring patterns to gutta-percha cylinders.*) (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Mode of producing printing surfaces - - (*Etching.*)	2464	25th Oct. 1853	David Bogue.
Producing plates for printing purposes by which the manipulatory process of engraving is superseded.	2481	26th Oct. 1853	James Thomas George Vizetelly.
Production of printing surfaces - - - (*Engraving and etching cylinders.*) (*Communicated by Auguste Feldetrappe.*)	2748	25th Nov. 1853	John Henry Johnson.
Means of ornamenting glass - - - (*Corroding.*)	2754	25th Nov. 1853	Emmanuel Barthélemy. Tony Petitjean. Jean Pierre Bourquin.
ENVELOPES.			
Machinery or apparatus for the manufacture of envelopes - - - - -	1971	24th Aug. 1853	George Pollard. George Mumby.
Manufacture of envelopes - - -	2742	25th Nov. 1853	Davidson Nichol.
Mode of preparing sheets of paper suitable for postal communication.	2821	5th Dec. 1853	Benjamin Skillman.
EXCAVATING, TUNNELLING, DREDGING.			
Excavating or digging earth; carrying or delivering the soil.	158	21st Jan. 1853	William Joseph Curtis.
Mode of constructing certain works applicable to aqueducts, viaducts, railways, canals, rivers, docks, harbours, lighthouses, breakwaters, reservoirs, tunnels, sea-walls, embankments, submarine foundations, and other useful purposes.	247	31st Jan. 1853	Samuel Perkes.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
EXCAVATING, &c.—*continued.*			
Machinery or apparatus for digging, excavating, or removing earth.	342	9th Feb. 1853	William Edward Newton.
Machinery for excavating	358	10th Feb. 1853	Henry M'Farlane.
Improvements in dredging-machines	1210	16th May 1853	William Littell Tizard.
Machine or apparatus for digging or raising earth, applicable to agricultural or engineering purposes.	1365	3rd June 1853	James Spotswood Wilson.
Construction of submarine or subaqueous tunnels or ways.	1575	30th June 1853	Auguste Edouard Loradoux Bellford.
Machinery or apparatus for digging, excavating, and removing earth.	1697	15th July 1853	William Edward Newton.
Construction of tunnels, sewers, drains, pipes, tubes, channels, and other like conduits for hydraulic or pneumatic purposes.	1854	9th Aug. 1853	Louis Hartog Bruck.
Excavating and dredging machine	2801	2nd Dec. 1853	Arthur Wellington Callen.
FELT; WADDING.			
Manufacture of batting or wadding	114	17th Jan. 1853	Auguste Edouard Loradoux Bellford.
Certain instruments, apparatus, and articles for the application of electro-galvanic and magnetic action for medical purposes. (*Metallic wadding.*)	806	4th April 1853	Antoine Burq.
FILTERING AND PURIFYING WATER AND OTHER LIQUIDS; SIEVES.			
Taps and other apparatus for filtering and drawing off liquids.	1	1st Jan. 1853	William Wilkinson.
Apparatus for refrigerating (*Applicable for purifying sea water.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Manufacture and refining of sugar	420	17th Feb. 1853	William Hawes.
Filters	481	25th Feb. 1853	Antonio Fedele Cossus.
Manufacture and refining of sugar	487	26th Feb. 1853	Joseph Brandeis.
Apparatus for filtering liquids	622	12th March 1853	Peter Armand le Comte de Fontainemoreau.
Apparatus for extracting liquid out of solid substances, specially applicable to the treatment of fatty matters.	691	21st March 1853	Jean Marie Durnerin.
Applying to illuminating the extract of bituminous products of coal, peat, and lignites; rectifying and depurating the essences and greasy matter from coal. (*Filtering coal oils.*)	770	31st March 1853	William Augustus Pascal Aymard.
Purifying water	893	13th April 1853	William Renwick Bowditch.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FILTERING, &c.—*continued.*			
An improved filter	907	14th April 1853	Alfred Guy.
Filter for water and other liquids	999	26th April 1853	Archibald Slate.
A filtering machine which acts under water and is applicable to the filtering of all liquids.	1007	27th April 1853	George Ferdinand de Fonvielle.
Certain improvements in wash-stands and baths; part of which improvements are also applicable to table fountains. (*Purifying the water.*)	1011	27th April 1853	James Dinning.
Improvements in distillation; apparatus connected therewith; also applicable to other purposes in which substances are to be treated by the assistance of a vacuum. (*Filtering.*)	1018	27th April 1853	Joseph Palin. Robert William Sievier.
Improvements in filters	1046	29th April 1853	Henry Witthaff.
Valves and stop-cocks	1091	4th May 1853	Edmund Jury Ockenden, the elder. Edmund Jury Ockenden, the younger.
Apparatus for purifying liquids in a ready and economical manner.	1227	18th May 1853	John Ryan.
Disinfecting sewage or other fetid matters; absorbing noxious gaseous exhalations. (*Also filtering water.*)	1252	20th May 1853	Thomas Isaac Dimsdale.
Improvement in filters	1382	4th June 1853	Thomas Russ Nash.
Treatment of certain oils	1601	5th July 1853	John Fall.
Apparatus for making tea and coffee, and other infusions or decoctions for chemical and other purposes.	1715	20th July 1853	John Robison.
Preparation of a black powder from coal; application thereof to the manufacture of paints, blacking, and various other purposes.	1900	13th Aug. 1853	John Gwynne.
Machinery for reducing wood and other vegetable fibres to pulp, applicable to the manufacture of paper, pasteboard, millboard, papier-mâché, mouldings, and other like purposes. (*Passing through sieves.*)	1911	15th Aug. 1853	Richard Archibald Brooman.
Mixture or composition of chemical agents for rendering sea water fit for washing, and for softening hard water for similar purposes.	1974	24th Aug. 1853	Edward Heard.
Purifying water	2201	23rd Sept. 1853	William Dantec.
Manufacture of artificial vinegar	2224	28th Sept. 1853	Joseph Fermont Van Waesberghe.
Method of rendering seawater fit for drinking and all other purposes where fresh water is ordinarily used.	2400	18th Oct. 1853	Charles Peynaud d'Azene.
Preparing rape-seed oil	2433	21st Oct. 1853	James Warburton.
Improvements in sugar-refining	2809	2nd Dec. 1853	Robert Reyburn.
Manufacture and refining of sugar	2811	2nd Dec. 1853	Henry Bessemer.
Double action or belt filterer	2820	5th Dec. 1853	Squier Cheavin.
Purifying spirit	2871	9th Dec. 1853	William Schaeffer.
Manufacture and refining of sugar (*Sugar filter.*)	2898	14th Dec. 1853	Edward Beanes.
Carts for distributing water or liquid manure	2943	17th Dec. 1853	Isaac James.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FILTERING, &c.—*continued.*			
Presses for expressing oil or other fluids from fruits, grains, or other substances. (*Metallic filter linings.*)	2951	19th Dec. 1853	Auguste Edouard Loradoux Bellford.
Apparatus for purifying and filtering residuous water - - - - - - -	2970	21st Dec. 1853	James Dinning. William Inglis.
FINISHING, DRESSING, SINGEING, CLEANSING, SHEARING, AND RAISING PILE ON WOVEN FABRICS.			
Manufacture of batting or wadding - - (*Glazing.*)	114	17th Jan. 1853	Auguste Edouard Loradoux Bellford.
Machinery for dressing cloth - - -	240	29th Jan. 1853	William Edward Newton.
Treatment or finishing of textile fabrics and materials. (*Singeing lace and piece-goods.*)	324	5th Feb. 1853	John Campbell.
Treatment, cleansing, or finishing of textile fabrics -	355	10th Feb. 1853	William Fulton.
Machinery for manufacturing woollen cloth - (*Napping.*)	470	24th Feb. 1853	Emile Adolphe Herrman.
Improvements in pile and loomed fabrics; cutting and finishing such fabrics; machinery employed therein.	657	17th March 1853	John Livesey.
Method of preparing, treating, and finishing cut-piled or raised fustians and other similar goods or fabrics; machinery or apparatus connected therewith. (*Shearing; singeing.*)	732	26th March 1853	James Worrall, junior.
Method of preparing, treating, and finishing certain textile fabrics called cords, thicksets, velveteens, and beaverteens.	768	30th March 1853	James Worrall, junior.
Improvements applicable to looms for the manufacture of textile fabrics - - - - (*Finishing and raising pile in the loom.*)	798	4th April 1853	Robert William Sievier. James Crosby.
Cleansing, preening, and removing wool flocks, waste and refuse from the cards, teazels, cylinder-raising gig and machinery used in the dressing of woollen cloths - - - -	972	22nd April 1853	William Asquith. Joseph Asquith.
Method of finishing &c. woven fabrics, machinery or apparatus employed therein.	977	23rd April 1853	Frederick Tompkins.
Apparatus for drying and finishing woven fabrics -	1149	10th May 1853	George Roberton. Alexander Roberton.
Treatment or finishing of textile fabrics - -	1153	10th May 1853	George Stevenson Buchanan.
Manufacture of pile fabrics; machinery or apparatus employed therein. (*Raising the pile.*)	1236	18th May 1853	Edward Briggs.
Machinery for raising a pile or flue by abrasion on linen, cotton, silk, and other fabrics.	1309	27th May 1853	William Wolfe Bonney.
Finishing muslin and other fabrics - - -	1721	20th July 1853	Alexander Cochran.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FINISHING, &c.—*continued.*			
Machinery for finishing &c. plain and fancy woven fabrics.	1726	21st July 1853	William Thorp.
Method of producing cut and fancy patterns in velvets, silks, and other textile fabrics.	1906	13th Aug. 1853	Hesketh Hughes.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Applying the gas for gassing.*) (*Communicated by Mons. Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Treatment or finishing of textile fabrics - -	1983	26th Aug. 1853	Robert Wilson.
Treating, stretching, or finishing textile fabrics; machinery or apparatus for effecting the same -	2217	27th Sept. 1853	Isaac Bury. William Green.
Treatment or finishing of woollen and worsted fabrics.	2419	19th Oct. 1853	William Binns.
Treatment or manufacture of gutta-percha, and application thereof. (*Also using carburet of hydrogen for cleansing stuffs &c.*) (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Spreading or distributing starch, gum, and other semi-fluid matters.	2514	31st Oct. 1853	George Hamilton.
Weaving and manufacturing raised pile-fabrics; machinery employed therein. (*Pile-raising; shearing.*)	2707	22nd Nov. 1853	Edward Briggs.
Manufacture of waterproof fabrics - -	2890	13th Dec. 1853	James Wansbrough.
Application of starch or other substances of a similar nature to woven fabrics; machinery or apparatus employed therein.	2916	15th Dec. 1853	Alexander Cochran.
Machinery or apparatus for finishing woven fabrics	2995	27th Dec. 1853	Thomas Williams Makin.
Improvements in the treatment of naphthas and other volatile hydro-carbons, and in the application of the same. (*For cleaning cloth.*)	2997	27th Dec. 1853	Frederick Crace Calvert.
Production of surface-finish to certain descriptions of fabrics composed of worsted, cotton, or silk, or combinations thereof. (*Watering moreens.*)	3019	29th Dec. 1853	James William Crossley.
Apparatus employed in singeing textile fabrics -	3029	31st Dec. 1853	Isaac Holroyd.
For trying the Strength of Fabrics—*see* "TESTING."			
FINISHING YARN AND THREAD.			
Manufacturing and treating caoutchouc - - (*Stretching caoutchouc thread.*)	22	5th Jan. 1853	Gustave Eugène Michel Gérard.
Treatment or finishing of textile fabrics or materials (*Singeing yarn.*)	324	5th Feb. 1853	John Campbell.
Treatment, cleansing, or finishing of textile fabrics - (*And yarns.*)	355	10th Feb. 1853	William Fulton.
Drying yarns - - - - - -	526	2nd March 1853	Marcel Vetillart.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FINISHING YARN, &c.—*continued.*			
Stretching, dressing, and finishing cotton and linen yarns or threads; machinery or apparatus connected therewith	1061	2nd May 1853	George Murton. William Hatton Langshaw.
Treating or preparing yarns or threads	1330	30th May 1853	William Green.
Preparing and finishing certain worsted yarns; apparatus employed therein.	1501	20th June 1853	Robert Midgley.
Machine for dressing or polishing thread	1696	15th July 1853	Jean Baptiste Jelie.
Treatment and finishing of threads or yarns	2744	25th Nov. 1853	William Calder.
Preparing, dressing, finishing, and winding cotton and linen yarns or threads; machinery or apparatus connected therewith (*Winding disclaimed.*)	2745	25th Nov. 1853	William Leigh Brook. Charles Brook, junior.
FIRE-ARMS.			
Manufacturing percussion-caps	55	8th Jan. 1853	John Abraham.
Manufacture of percussion-caps	66	10th Jan. 1853	John Davies Morries Stirling.
Machinery for shaping metals (*For making gun-barrels.*)	82	12th Jan. 1853	John Arrowsmith.
Fire-arms and projectiles	86	12th Jan. 1853	Edward Haslewood.
Fire-arms	131	19th Jan. 1853	Joseph Rock Cooper.
Certain improvements in fire-arms	212	28th Jan. 1853	William Tranter.
Repeating-pistols and other fire-arms	305	4th Feb. 1853	Philip Webley.
Application of explosive compounds (*As primers.*)	306	4th Feb. 1853	George Winiwarter.
Primers for fire-arms	319	5th Feb. 1853	Antoine Wollowicz.
Fire-arms	371	12th Feb. 1853	George Winiwarter.
Manufacture of fire-arms	452	22nd Feb. 1853	George Winiwarter.
Rotating breech fire-arms	535	3rd March 1853	Samuel Colt.
Rotating breech fire-arms	538	3rd March 1853	Samuel Colt.
Primers for fire-arms	540	3rd March 1853	William Edward Newton.
Fire-arms; means of loading the same	555	5th March 1853	John Gedge.
Revolving or repeating fire-arms	577	7th March 1853	John Hall. John Crofts.
Gunnery and projectiles (with pouch for the latter) adapted for muskets, rifles, pistols, and heavy cannon, for field-pieces or forts, batteries, ships of war and other vessels.	591	8th March 1853	John James Alexander Maccarthy.
Improvements in fire-arms	620	12th March 1853	John Gilby.
Construction of sights for fire-arms	628	12th March 1853	Thomas Hunt.
Improvements in fire-arms	653	16th March 1853	Henry Richardson Fanshawe.
Construction of repeating or revolving and other pistols and fire-arms.	743	29th March 1853	James Webley.
New kinds of fire-arms	940	19th April 1853	William Hale.
Improvements in fire-arms	964	21st April 1853	Philip Harris.
Improvements in fire-arms	996	26th April 1853	Isaac Brentnall Sheath.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ARMS—*continued.*			
Construction of revolving or repeating fire-arms; loading the same.	1038	29th April 1853	Thomas Pennell.
Certain improvements in fire-arms	1123	6th May 1853	Mariana Riera.
An improved gun	1211	16th May 1853	Moreton Hassall Phillips.
Improved sight for cannons or other ordnance	1277	25th May 1853	William Church.
Improvements in fire-arms	1298	26th May 1853	William James Harvey.
Breech-loading fire-arms; cartridges for use with such arms.	1320	28th May 1853	William Walker Marston.
Improvements in fire-arms	1332	30th May 1853	Richard Archibald Brooman.
Manufacture of detonating or percussion caps	1404	8th June 1853	John Horrocks, junior. James Dunlop Horrocks.
Guns and other fire-arms; manner of loading and discharging same; balls, cartridges, and explosive compounds.	1447	15th June 1853	Charles Evan Reeves.
Construction of fire-arms	1499	20th June 1853	Charles Crickmay.
Manufacture of certain drawing or mathematical instruments, also packing or fitting the same in their cases;—also applicable to the packing or fitting of other articles (*Cases for packing fire-arms.*)	1634	9th July 1853	James Parkes. Samuel Hickling Parkes.
Machinery for boring metals	1703	16th July 1853	Samuel Colt.
Fire-arms and ordnance	1870	11th Aug. 1853	Richard Farmer Brand.
Sights for rifles	1881	12th Aug. 1853	Thomas Turner. John Field Swinburn.
Improvements in fire-arms	1966	24th Aug. 1853	Auguste Edouard Loradoux Bellford.
A method of and machinery for manufacturing or producing certain descriptions of gun and pistol barrels.	1988	27th Aug. 1853	Charles William Lancaster.
Breech-loading guns	2046	5th Sept. 1853	William Edward Newton.
Repeating-pistols and other fire-arms	2127	14th Sept. 1853	Phillip Webley.
Fire-arms; discharging the same	2176	20th Sept. 1853	Robert Fletcher. John Smith.
Revolving fire-arms	2184	20th Sept. 1853	Henry Needham.
Method of constructing breech-loading fire-arms	2197	23rd Sept. 1853	James Leetch.
Firing explosive compounds (*Discharging cannon; exploding shells.*)	2264	4th Oct. 1853	John Norton.
Fire-arms and cartridges	2313	8th Oct. 1853	William Edward Newton.
Improvements in fire-arms	2351	12th Oct. 1853	Richard Jones. Charles John Jones.
Improvements in fire-arms	2409	19th Oct. 1853	John Norton.
Improvements in fire-arms	2590	8th Nov. 1853	Edmund Hugh Graham.
Breech-loading fire-arms; cartridges for use with such arms. (*Communicated by William Walker Marston.*)	2690	19th Nov. 1853	Moses Poole.
Fire-arms and ordnance (*Barrels.*)	2697	19th Nov. 1853	Richard Farmer Brand.
Improvements in fire-arms	2712	22nd Nov. 1853	Robert Adams.
Improvements in fire-arms	2778	29th Nov. 1853	Auguste Edouard Loradoux Bellford.
Fire-arms and ordnance	2839	6th Dec. 1853	Alfred Vincent Newton.
Certain improvements in fire-arms; bullets and waddings to be used therewith.	2921	16th Dec. 1853	William Tranter.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ARMS—*continued.*			
An improved revolving-pistol	2924	16th Dec. 1853	Thomas Williams.
Locks of fire-arms	2987	24th Dec. 1853	Richard George Coles.
Discharging projectiles (*Causing the barrels to rotate.*)	3008	28th Dec. 1853	John Macintosh.
Construction of fire-arms	3044	31st Dec. 1853	François Aristide Clerville.
FIRE-ESCAPES; EXTINGUISHING FIRE.			
Construction of ships or other navigable vessels; machinery or apparatus connected therewith. (*For extinguishing fire.*)	33	6th Jan. 1853	John Browne.
Marine pumps and apparatus connected therewith (*Applicable for extinguishing fire.*)	211	28th Jan. 1853	James Learmont.
Ships' fire-engines	236	29th Jan. 1853	James Shand.
Portable fire-engine	557	5th March 1853	Thomas Wells Cross.
Fire-escape—"The Ignevador"	1618	7th July 1853	Henry Bate.
An invention for instantaneously extinguishing conflagrations in ships' holds, warehouses, and other buildings.	2499	28th Oct. 1853	William Thompson.
Machinery to save persons and property in case of fire;—also applicable for raising and lowering weights of any kind; also for compression and other useful purposes (*Fire-escapes.*)	2813	3rd Dec. 1853	Charles Edmund Green. John Bayliss.
FIREPLACES, GRATES, STOVES.			
Stoves for cooking; apparatus connected therewith	58	8th Jan. 1853	John Henry Johnson.
Stove-grates	127	18th Jan. 1853	John Sheringham.
Stove and apparatus for heating air for blast purposes.	408	16th Feb. 1853	Charles Sheppard.
Construction and arrangements of kitchen-boilers and flues for ranges.	490	26th Feb. 1853	Ebenezer Thornton.
Cooking apparatus (*Kitchen-range; ship's galley.*)	573	7th March 1853	John Little.
Portable iron stove	580	8th March 1853	Thomas Dryland.
Gas-stove	592	9th March 1853	James Kimberley.
Construction of gas-stoves	717	24th March 1853	Henry Webster. Edward Dawson Stones.
Grates and stoves	1215	17th May 1853	John Lee Stevens.
Kitchen ranges or fire-grates	1224	18th May 1853	Wharton Rye.
Stoves, grates, or fire-places	1334	31st May 1853	William Brookes.
Improved stove or kiln	1477	17th June 1853	Auguste Edouard Loradoux Bellford.
Improvements in gas-stoves	1763	26th July 1853	Alfred William Warder.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIREPLACES, &c.—*continued.*			
Stoves for warming or heating buildings	1809	2nd Aug. 1853	George Richardson.
Improvement in gas stoves	1831	5th Aug. 1853	William Smith. Thomas Phillips.
Combining glass and other materials (*Fronts of grates.*)	1850	9th Aug. 1853	Thomas Young Hall.
A machine for destroying weeds (*A roller enclosing a fire-grate.*)	1965	23rd Aug. 1853	William M'Leish.
Kitchen-ranges and cooking-apparatus	2000	29th Aug. 1853	Joseph Cundy.
Apparatus for heating	2002	29th Aug. 1853	Peter Armand le Comte de Fontainemoreau.
Gas-stoves	2010	30th Aug. 1853	Joseph Cundy.
Improved gas-stove	2141	15th Sept. 1853	Eliezer Edwards.
Stoves and kitchen-ranges	2287	6th Oct. 1853	Henry Goddard.
Fireplaces, grates, or furnaces	2495	28th Oct. 1853	Malcolm Maclaren.
An improved construction of gas-stove	2589	8th Nov. 1853	John Gardiner. William Watkin Wynne.
Hot-air stoves	2652	16th Nov. 1853	John Riddell Musgrave. Robert Musgrave. James Musgrave.
Improvements in cooking-stoves	2667	17th Nov. 1853	William Underwood.
Ventilating drying-stoves	2676	18th Nov. 1853	Thomas Holmes.
An improved cooking apparatus (*Stove.*)	2954	20th Dec. 1853	Adam Paterson.
FIREPROOFING.			
Rendering wood more durable and uninflammable	330	7th Feb. 1853	William Romaine.
Preserving, or preventing decomposition in, vegetable and animal substances and matters. (*Rendering fabrics uninflammable.*)	740	28th March 1853	George Edward Dering.
Fixing marquetry on to floors, of wood, stone, or metal, and rendering such floors fireproof.	2198	23rd Sept. 1853	Charles Alexander.
Preserving timber and other vegetable matters	2350	12th Oct. 1853	Charles Scott Jackson.
FISHING-TACKLE.			
Manufacture of nets for fishing and other purposes	145	20th Jan. 1853	Georges Edouard Gazagnaire.
Applying the ascensional force of balloons to various useful purposes. (*Attaching to harpoons.*)	1088	4th May 1853	Jean Brando Giannetti.
Manufacture of fishing and other nets	1387	6th June 1853	Joseph Gundry.
Fishing-rods	2017	31st Aug. 1853	Thomas Dawson. Thomas Restell.
Manufacture of nets for fishing and other purposes	2758	26th Nov. 1853	Georges Edouard Gazagnaire.
Artificial bait for fish	2902	14th Dec. 1853	Richard James Norman King.
Machinery for manufacturing needles and fish-hooks	2947	19th Dec. 1853	Henry Milward.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FLUES AND CHIMNEYS; CHIMNEYTOPS.			
A new composition of different metals or metallic substances. (*For moulding chimney-tops.*)	35	6th Jan. 1853	Edme Augustin Chameroy.
Construction of furnaces (*Flues.*)	148	21st Jan. 1853	George Carter.
Steam-boiler chimneys	257	31st Jan. 1853	Israel P. Magoon.
Construction of furnaces or flues whereby economy in the use of fuel, the consumption of smoke or gases, and the utilizing thereof, are ensured.	350	10th Feb. 1853	James Spotswood Wilson.
Improved chimney-pot	443	21st Feb. 1853	Richard Farrant.
Steam-boilers (*Flues.*)	447	21st Feb. 1853	John Charles Pearce.
Construction of furnaces or flues of steam-boilers, coppers, and other like vessels for heating or evaporating liquids.	475	25th Feb. 1853	Benjamin Price.
Construction and arrangements of kitchen-boilers and flues for ranges.	490	26th Feb. 1853	Ebenezer Thornton.
An improvement in certain vessels or utensils for heating liquids. (*Arranging flues in kettles &c.*)	845	8th April 1853	William Ford Smith.
Treatment of ores and other substances containing metals to obtain products therefrom; apparatus used therein. (*Retort flues.*)	912	14th April 1853	David Zenner.
Means of consuming smoke	1049	29th April 1853	James Bristow. Henry Attwood.
Improvements in hot-air furnaces for heating buildings, some of which improvements are applicable to other furnaces.	1081	3rd May 1853	William Edward Newton.
Construction of chimneys or flues; apparatus for increasing draft, consuming smoke or utilizing the same.	1192	14th May 1853	John Browne.
Improvements in steam-boilers	1366	3rd June 1853	Isaiah Kendrick.
Construction of steam-boilers; steam-boiler furnaces	1433	13th June 1853	William David Paine. George Alfred Paine.
Chimney-tops or flues	1478	17th June 1853	Robert Lister.
Construction of steam-boilers or generators; arrangement of furnaces connected therewith.	1528	23rd June 1853	James Burrows.
Construction of furnaces for the purpose of obtaining products from ores.	1672	14th July 1853	William Henderson.
Kilns for baking or burning clay	1749	25th July 1853	John Ferguson.
Improvements in steam-boilers	1760	26th July 1853	Joseph Barrans.
Application of heat for baking and drying purposes; generation of steam.	1848	8th Aug. 1853	William Hickson.
Steam engines and boilers	1857	10th Aug. 1853	George Parsons.
Construction of iron smoke-funnels and other like structures or articles.	2042	5th Sept. 1853	John Clare, junior.
Furnaces and fireplaces; prevention of smoke	2657	16th Nov. 1853	John Ferguson.
Mode of constructing marine boilers	2660	16th Nov. 1853	James Bristow. Henry Attwood.
Apparatus for the production of carburetted hydrogen gas.	2702	21st Nov. 1853	Sir John Scott Lillie.
Construction of steam boilers or generators; arrangement of furnaces connected therewith.	2963	20th Dec. 1853	James Burrows.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Food for Cattle; Cutting Chaff; Slicing Roots.			
An invention which may be used for cutting turnips, mangel-wurzel, carrots, and other roots, or for bruising them only, or reducing them to a pulp, and for mixing them with meal, as may be required, and also for grinding or crushing apples for cider.	248	31st Jan. 1853	Richard Palmer.
Treating brewery and distillery grains for the production of food for cattle; extracting the bitter principle and other products from the refuse hops of breweries.	543	3rd March 1853	James Waterman.
Cutting roots and other vegetable substances -	562	7th March 1853	Richard Barter.
Machinery for cutting or chopping roots, plants, or other similar substances.	1041	29th April 1853	Thomas Collins Banfield.
Machines for cutting chaff, straw, gorse, and other similar substances.	1052	30th April 1853	John Smith.
Apparatus for cutting vegetable and other substances	1570	29th June 1853	George Arthur Biddell.
Preparing food and litter for cattle, pigs, and other animals.	1811	3rd Aug. 1853	Joseph Clisild Daniell.
Machinery for cutting turnips and other roots -	2405	18th Oct. 1853	Isaac Hartas.
Machinery for cutting, splitting, and bruising vegetable substances.	2718	22nd Nov. 1853	Francis Arding.
Fountains and Jets of Water.			
Certain improvements in wash-stands and baths, part of which improvements are also applicable to table fountains.	1011	27th April 1853	James Dinning.
Depositing metals or alloys of metals - -	1777	29th July 1853	William Edward Newton.
Fruit (*Cleaning and Paring*).			
Fruit-cleaning machine - - - -	1933	18th Aug. 1853	William Symes.
Machinery for paring fruit and vegetables - -	2863	9th Dec. 1853	Charles Mackenzie. Alexander Turnbull.
Fuel; Cleansing Coal.			
Manufacturing peat bricks for fuel by means of a machine and arrangements of machinery titled "a central, circular, and horizontal motion."	94	13th Jan. 1853	Edward Wills Uren.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FUEL, &c.—*continued.*			
Manufacture of artificial fuel	163	22nd Jan. 1853	John Powell Matthew Myers.
Cleansing and separating ores and coal	582	8th March 1853	Nicolas Schmitt.
Treatment or manufacture of peat and other substances to be used as fuel.	1117	6th May 1853	James Egleson Anderson Gwynne.
Manufacture of artificial fuel	1259	21st May 1853	Louis Gervais Dieudonné Buffet Delmas Ducayla.
Manufacture of fuel; machinery connected therewith.	1397	7th June 1853	Edward Lavender.
Apparatus for preparing the materials employed in the manufacture of certain composition fire-lights	1882	12th Aug. 1853	Edward Lavender. Robert Lavender.
Manufacture of fuel	1884	12th Aug. 1853	Richard Archibald Brooman.
Preparation or manufacture of fuel	1901	13th Aug. 1853	John Gwynne. James Egleson Anderson Gwynne.
Burning certain fluids for the purpose of obtaining heat. (*Coal-tar &c.*)	2132	14th Sept. 1853	James Higgin.
Treatment of minerals for the purpose of separating impurities therefrom. (*Shale from coal.*)	2185	20th Sept. 1853	Joseph Gibbs.
Method of converting fine coal into solid lumps (*Pressing in a mould.*)	2209	26th Sept. 1853	Charles Frederick Stansbury.
Treatment of lignite or wood-coal; obtaining various useful products therefrom.	2343	12th Oct. 1853	Edme Jules Maumené.
An improved artificial fossil-coal fuel—"Blunt's diamond coal-fuel."	2454	24th Oct. 1853	Charles Fly Blunt.
Mode of treating peat for the conversion of the same into an artificial coal, which may be used in that state or afterwards reduced to coke.	2765	26th Nov. 1853	Joseph Michel Henri Perodeaud.
Manufacture of fuel; its preparation and application for the reduction of ores, fusing and refining metals, cementation or making steel, and treating salts. (*Mixed fuel and coke.*)	2817	3rd Dec. 1853	John Gwynne. James Egleson Anderson Gwynne.
Machinery or apparatus for making bricks and other articles from clay and other plastic materials. (*Pressing fuel.*)	2904	14th Dec. 1853	William Beckett Johnson.
FURNACES (*Making and Constructing.*)			
Economizing fuel in the generation and heating of steam.	69	11th Jan. 1853	Joseph Beattie.
Steam-generators	135	19th Jan. 1853	Celestin Malo.
Grates of furnaces used in the manufacture of glass	142	20th Jan. 1853	Richard Mountford Deeley.
Construction of furnaces	148	21st Jan. 1853	George Carter.
Construction of glass-house furnaces	159	21st Jan. 1853	Reuben Plant.
Furnaces and apparatus combined therewith for making wrought iron directly from the ore, and for collecting and condensing the oxydes or other substances evaporated in the process of deoxydizing iron or other ores.	283	2nd Feb. 1853	Auguste Edouard Loradoux Bellford.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Steam-engines	331	7th Feb. 1853	William Scott. Robert Brough. James Rinoe. Thomas Mann.
Construction of furnaces or flues whereby economy in the use of fuel, the consumption of smoke or gases, and the utilizing thereof, are ensured.	350	10th Feb. 1853	James Spotswood Wilson.
Blast-furnaces	373	12th Feb. 1853	George Parry.
Manufacture of malleable iron and other metals	426	18th Feb. 1853	William Darling.
Steam-boilers	447	21st Feb. 1853	John Charles Pearce.
Construction of furnaces or flues of steam-boilers, coppers, and other like vessels for heating or evaporating liquids.	475	25th Feb. 1853	Benjamin Price.
Treatment or manufacture of animal charcoal	639	14th March 1853	John Scott.
Apparatus for heating and annealing metals	654	16th March 1853	Samuel Colt.
Construction of furnaces and annealing kilns employed in the manufacture of glass.	659	17th March 1853	William Blinkhorn.
Certain improvements in steam-boilers	728	26th March 1853	Thomas Smedley.
Manufacture of crown, sheet, plate, and bottle glass	762	30th March 1853	James Bowron.
Manufacture of paste and chamel buttons (*Cupels.*)	899	14th April 1853	Constant Jouffroy Duméry
Consuming or preventing smoke and heating liquids.	922	16th April 1853	Samuel Bayliss.
A furnace called "The Vestal Furnace," for the carbonization of peat or turf, or other substances.	934	18th April 1853	Hans Wallace Allen.
Apparatus for heating	1035	28th April 1853	William Armand Gilbee.
Improvements in hot air furnaces for heating buildings, some of which improvements are applicable to other furnaces.	1081	3rd May 1853	William Edward Newton.
Improvements in furnaces	1100	5th May 1853	William Moore.
Improvements in furnaces	1307	27th May 1853	John Lee Stevens.
Furnaces for steam-boilers and other purposes	1342	1st June 1853	Thomas Aitken.
Improvements in steam-boilers	1366	3rd June 1853	Isaiah Kendrick.
Construction of steam boilers; steam boiler furnaces	1433	13th June 1853	William David Paine. George Alfred Paine.
Construction of steam boilers or generators; arrangement of furnaces connected therewith.	1528	23rd June 1853	James Burrows.
Construction of furnaces	1566	29th June 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of glass	1604	5th July 1853	George Mackay.
Improvements in steam-boilers	1608	5th July 1853	Peter Erard.
Apparatus used in the manufacture of gas	1621	7th July 1853	Alexander Angus Croll.
Reverberatory and other furnaces	1650	11th July 1853	George Dalton.
Construction of furnaces for the purpose of obtaining products from ores.	1672	14th July 1853	William Henderson.
Method of melting or fusing iron or metals; apparatus employed therein.	1745	25th July 1853	William Ireland.
Apparatus for consuming smoke	1790	1st Aug. 1853	John Gray.
Application of heat for baking and drying purposes generation of steam.	1848	8th Aug. 1853	William Hickson.
Improvements in furnaces	1863	10th Aug. 1853	Samuel Hall
Furnaces for smelting iron-stones and ores	1880	12th Aug. 1853	James Strong.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Apparatus for heating - - - -	2002	29th Aug. 1853	Peter Armand le Comte de Fontainemoreau.
An improvement in furnaces - - -	2035	3rd Sept. 1853	John Thomas Jewiss. Daniel Jewiss.
Construction of air-furnaces, partly applicable to other furnaces.	2051	6th Sept. 1853	Henry Wilkinson.
Improvements in furnaces - - -	2082	9th Sept. 1853	Jonathan Amory.
Boilers and furnaces for generating steam - -	2108	12th Sept. 1853	Joseph Maudslay.
Furnaces for effecting the consumption of smoke -	2109	12th Sept. 1853	John Robison. William Jackson.
Locomotive and other boilers for generating steam -	2118	13th Sept. 1853	Alexander Allan.
Steam-engine boiler and other furnaces - -	2152	16th Sept. 1853	David Mushet.
Kilns for baking and burning articles in earthenware - - - - - - - (*And arranging furnaces.*)	2159	16th Sept. 1853	Alexander Thomson. David Lockerbie.
Heating reverberatory and other furnaces - -	2255	3rd Oct. 1853	William Joseph Thompson.
Steam-engine boilers - - - -	2297	7th Oct. 1853	John Onions. Samuel Bromhead.
Manufacture of wheels and tires; construction of furnaces employed in such or similar manufactures.	2306	8th Oct. 1853	Henry Dubs.
Improvements in furnaces - - -	2359	13th Oct. 1853	Abraham Pope.
Means of or apparatus for reducing the quantity of smoke from the furnaces of boilers, coppers, pans, and other like vessels.	2377	15th Oct. 1853	Benjamin Price.
Apparatus applicable to the manufacturing and the revivification of animal or vegetable charcoal, and other useful purposes.	2388	17th Oct. 1853	George Frederick Chantrell.
Manufacture of zinc white - - - (*Communicated by Louis Pierre Geslin.*)	2401	18th Oct. 1853	Alphonse Doste Noel.
Prevention of smoke in steam-boilers - -	2424	20th Oct. 1853	John Beasley Burney.
Carbonizing and distilling peat, coal, wood, and other animal, vegetable, and mineral substances.	2435	21st Oct. 1853	Jean François Felix Challeton.
Construction and arrangement of puddling-furnaces, applicable to other furnaces used in the generation of steam.	2461	25th Oct. 1853	Joseph Beasley, junior.
Construction of air furnaces for the fusion of steel and other metals, and for economizing fuel.	2472	26th Oct. 1853	George Holworthy Palmer.
Construction of ovens and furnaces - - -	2521	1st Nov. 1853	John Crowley.
Construction of steam-boiler and other furnaces -	2559	4th Nov. 1853	George Nasmyth.
Construction of steam-boilers; mode or method of fixing the same.	2560	4th Nov. 1853	William Hindman.
Steam-boiler and other furnaces - - -	2574	5th Nov. 1853	Robert William Jearrad.
Self-feeding furnaces - - - -	2651	16th Nov. 1853	James Wills Wayte.
Furnaces and fire-places; prevention of smoke -	2657	16th Nov. 1853	John Ferguson.
Mode of constructing marine boilers - - -	2660	16th Nov. 1853	James Bristow. Henry Attwood.
Construction of steam-engine boiler and other furnaces.	2661	17th Nov. 1853	George Carter.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Manufacture of iron	2687	18th Nov. 1853	Richard Stuart Norris. Ebenezer Talbott.
Consumption or prevention of smoke	2826	5th Dec. 1853	James Robertson.
Construction of boiler and other furnaces	2835	6th Dec. 1853	Robert Christopher Witty.
Furnaces for the manufacture of steel	2881	10th Dec. 1853	John Henry Johnson.
Boilers and furnaces	2882	10th Dec. 1853	Edward Green.
Obtaining motive power (*Steam-engine furnace.*)	2912	15th Dec. 1853	Jean Baptiste Pascal.
Manufacture of liquid hydro-carbons and paraffine	2958	20th Dec. 1853	Paul Wagenmann.
Construction of steam boilers or generators; arrangement of furnaces connected therewith.	2963	20th Dec. 1853	James Burrows.
Construction of certain machinery and apparatus for the manufacture of bricks and tiles.	2969	21st Dec. 1853	Thomas Vincent Lee.
Apparatus for regulating the supply of air to furnaces, and for preventing radiation of heat from fire-doors and other parts of the fronts of furnaces.	3000	27th Dec. 1853	Thomas Symes Prideaux.
FURNACES (*Supplying with Fuel*).			
Manufacture of iron (*Heating the furnaces with gas.*)	218	28th Jan. 1853	Thomas Symes Prideaux.
Manufacture of white oxide of zinc	998	26th April 1853	George Kennedy Geyelin.
Construction of steam-boilers; steam-boiler furnaces	1433	13th June 1853	William David Paine. George Alfred Paine.
Improvements in furnaces used with steam-boilers for the purpose of consuming smoke and economizing fuel.	1682	15th July 1853	Robert Gordon.
Method of melting or fusing iron or metals; apparatus employed therein.	1745	25th July 1853	William Ireland.
Application of heat for baking and drying purposes; generation of steam.	1848	8th Aug. 1853	William Hickson.
Improvements in furnaces	1863	10th Aug. 1853	Samuel Hall.
Burning certain fluids for the purpose of obtaining heat.	2132	14th Sept. 1853	James Higgin.
Steam-engine boiler and other furnaces	2152	16th Sept. 1853	David Mushet.
Kilns for baking and burning articles in earthenware	2159	16th Sept. 1853	Alexander Thomson. David Lockerbie.
Improvements in furnaces	2359	13th Oct. 1853	Abraham Pope.
Self-feeding furnaces	2651	16th Nov. 1853	James Wills Wayte.
Consumption or prevention of smoke	2826	5th Dec. 1853	James Robertson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNITURE,—BEDSTEADS, TABLES, CHAIRS; CASTORS AND FASTENINGS; CLEANING FURNITURE.			
Making a tessellated pavement (*Applicable for the tops of tables, &c.*)	3	1st Jan. 1853	John Addison. Henry S. Eicke.
Alarm-bedstead	34	6th Jan. 1853	Robert Watson Savage.
A chair to be employed for preventing sea-sickness	67	10th Jan. 1853	Frederick Schneider.
Certain apparatus and arrangements applicable to steam-boats and other navigable vessels, for the purpose of preventing sea-sickness. (*A seat buoyed up by a balloon.*)	143	20th Jan. 1853	Horace de Manara.
Ornamenting walls, ceilings, and other surfaces (*As tables.*)	144	20th Jan. 1853	William Riddle.
Manufacture of articles of furniture, and other articles of a useful and ornamental character, by the use and application of a certain vegetable production belonging to the family of the cactus plant; treating and preparing such vegetable production so as to render it available for the above purposes.	157	21st Jan. 1853	Alexander Prince.
Construction of collapsible framework of wood or iron which may be employed for forming portable bedsteads &c.	241	29th Jan. 1853	Jean Baptiste Lavanchy.
An improved bedstead which may be used as a vehicle.	269	1st Feb. 1853	Eliezer Edwards.
Construction of metallic bedsteads	302	4th Feb. 1853	William Brown.
Mode of giving flexibility to sofas, seats, and other similar articles.	382	14th Feb. 1853	Peter Armand le Comte de Fontainemoreau.
Metallic bedsteads	534	3rd March 1853	Martin Billing.
Construction of bedsteads	552	4th March 1853	James Boydell.
Construction of bedsteads and other frames	585	8th March 1853	John Wright.
Castor for legs of furniture and other purposes	604	9th March 1853	William August Holskamp.
Improvements in chests for the use of emigrants, whereby they are also made applicable to other purposes. (*As beds.*)	635	14th March 1853	John O'Leary.
Portable double-action folding chair	642	15th March 1853	William Morgan.
Certain improvements in bed-hangers for ships carrying emigrant passengers; manner of manufacturing them.	674	18th March 1853	Robert Oates Christian.
Portable sketching-apparatus for artists (*A camp stool.*)	695	21st March 1853	John Brett
Means of supporting or retaining bedsteads or other articles of furniture in their proper positions.	777	1st April 1853	Bartholomew Brittain.
Beds or couches for sick persons	794	4th April 1853	James Findlow.
Decoration of furniture panels and other surfaces (*Ferns &c. arranged under glass.*)	882	12th April 1853	Eliza Cunnington.
Construction of easy-chairs (*Or tables.*)	909	14th April 1853	Robert Wyburn.
Manufacture of metal bedsteads	1148	10th May 1853	George Tillett.
Manufacture of articles of marble (*Tables &c.*)	1188	13th May 1853	John Knowles. Edward Taylor Bellhouse.
Castors for furniture	1264	23rd May 1853	Evan Evans.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNITURE, &c.—*continued.*			
Elastic spring beds, mattresses, cushions, and all kinds of spring stuffing for upholstery work generally, making them lighter and more portable. (*Laths or sacking.*)	1325	30th May 1853	Joseph Brown.
Improvements in chairs - - - - -	1377	4th June 1853	Henry John Betjemann.
Application and combination of glass, porcelain, stoneware, earthenware, terra-cotta, composition in plaster called scagliola and majolica ware. (*Sofas, tables, cabinet drawers.*)	1480	17th June 1853	James Hogg.
Application of baths to articles used for resting the human body. (*Bottoms of bedsteads, sofas, or couches.*)	1512	20th June 1853	Joseph Skertchly, junior.
Sofa springs, useful for spring-stuffed upholstery work generally; adaptation thereof to mattresses.	1652	12th July 1853	Joseph Bacon Finnemore.
Construction of portable metallic folding bedsteads, chair-bedsteads, chairs, sofas, couches, settees, and such like articles, for the use of emigrants and others;—partly applicable to ordinary bedsteads, sofas, couches, chairs, and such like articles in general.	1710	18th July 1853	Samuel Perkes.
Means of carrying, bedding, and bathing the injured, ill, or invalid persons.	1826	4th Aug. 1853	Barthelemy Louis François Xavier Fléchelle.
Improvements applicable to metallic bedsteads, couches, chairs, and such other articles as are or may be used for sitting, lying, and reclining upon - - - - - - -	2047	6th Sept. 1853	Thomas Bollmann Upfill. William Brown.
Portable chairs and tables - - -	2098	10th Sept. 1853	Thomas Metcalfe.
Improvements in chairs, couches, and tables -	2100	10th Sept. 1853	John Ward.
Construction of portable articles of furniture - (*Chairs and tables.*)	2129	14th Sept. 1853	Alexander Wallace. George Galloway.
Improvements in chairs, whereby they are rendered more portable, and can be converted into other useful articles of household furniture. (*As a settee or lounge.*)	2210	26th Sept. 1853	Joseph Ellisdon.
A new and useful article of furniture to serve the purposes of a bedstead, a toilet-table or a washstand and a writing-desk - - -	2310	8th Oct. 1853	Henry Richardson Plimpton. James Leonard Plimpton.
Chair-bedstead - - - - -	2527	1st Nov. 1853	Henry Tylor.
Metal bedsteads - - - - -	2546	2nd Nov. 1853	Charles Iles.
Improvements in chairs - - - -	2553	3rd Nov. 1853	William Patterson.
Improvements in furniture-castors - -	2572	5th Nov. 1853	John Hyde.
An improved construction of expanding tables -	2621	11th Nov. 1853	John Martin Levien.
Manufacturing liquid quartz or silex to be used in the manufacture of certain compositions for ornamental and useful purposes. (*And in forming tables.*)	2991	24th Dec. 1853	Harris Hardinge.
Improvements in the treatment of naphthas and other volatile hydro-carbons, and in the application of the same. (*Furniture paste.*)	2997	27th Dec. 1853	Frederick Crace Calvert.
Friction joints or fastenings - - - (*For card-tables.*)	3018	29th Dec. 1853	James White.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAITERS.			
Manufacture of travelling-cases, wrappers, and certain articles of dress hitherto manufactured of leather - - - - - - (*Gaiters and overalls.*)	17	4th Jan. 1853	Joseph James Welch. John Stewart Margetson.
Means of depriving caoutchouc of all unpleasant odour, and of imparting to it various agreeable perfumes. (*Applicable to leggings &c.*)	1982	26th Aug. 1853	Eugène de Varroc.
Manufacture of gaiters - - - -	3010	28th Dec. 1853	Francis Parker.
GAS (*Making and Purifying*).			
Manufacture of gas - - - - - -	16	4th Jan. 1853	Edward Clarence Shepard.
Process of and apparatus for distilling certain vegetable and mineral matters, also animal bones and flesh.	174	24th Jan. 1853	David Clovis Knab.
Manufacture of iron - - - - -	218	28th Jan. 1853	Thomas Symes Prideaux.
Economical production of combustible gases for the purpose of illumination - - - - -	513	1st March 1853	Charles Flude. James Waterman.
Illuminating apparatus; production of light -	570	7th March 1853	Joseph John William Watson.
Obtaining oxygen for manufacturing purposes -	627	12th March 1853	George Michiels.
Manufacture of gas - - - - - -	630	12th March 1853	Robert Christopher Witty.
Heating furnaces - - - - - -	805	4th April 1853	Francis Steigewald.
Apparatus for the manufacture of gas and coke -	820	5th April 1853	John Thomas.
Manufacture and purification of gas for illumination, and certain products therefrom; apparatus for that purpose.	924	16th April 1853	Jean Marie Souchon.
Boilers or generators to be used in generating gas for driving rotary or other engines, or for other purposes.	1251	20th May 1853	Auguste Edouard Loradoux Bellford.
Purification of coal gas for the purposes of illuminating and heating; obtaining by the ingredients used therefor, manures, salts of ammonia, and sulphur.	1258	21st May 1853	William Chisholm.
A system of permanent circulation of caloric, intended to produce and overheat gas, &c.	1363	3rd June 1853	Ferdinand Louis Gossart.
Magneto-electric apparatus suitable for the production of motive-power, light, and heat.	1587	1st July 1853	Edward Clarence Shepard.
Manufacture of gas - - - - -	1591	2nd July 1853	Edward Clarence Shepard.
Apparatus used in the manufacture of gas - -	1621	7th July 1853	Alexander Angus Croll.
Manufacture of gas - - - - - -	1798	1st Aug. 1853	Richard Holme.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Purification of gas; treatment of the material used in such purification.	1964	23rd Aug. 1853	William Mann.
Apparatus for generating and applying carbonic acid gas.	1998	27th Aug. 1853	Samuel Taylor.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAS, &c.—*continued.*			
Apparatus and means for removing matters or heat from currents of air, gases or vapours, or from liquids: communicating matters or heat to the same.	2123	13th Sept 1853	Moses Poole.
Process for purifying gas - - - - - -	2124	13th Sept. 1853	Richard Laming.
Carbonizing and distilling peat, coal, wood, and other animal, vegetable and mineral substances.	2435	21st Oct. 1853	Jean François Felix Challeton.
Utilizing the saponaceous matters contained in the waste waters of woollen and other manufactories	2519	31st Oct. 1853	Celestin Pechoin. Eugène Pechoin Barades.
Manufactnre of illuminating gas - - -	2523	1st Nov. 1853	James Hansor.
Mode of manufacturing the combustible gases resulting from the decomposition of water or steam; construction of apparatus connected therewith.	2561	4th Nov. 1853	William Gilbert Ginty.
Manufacture of bar and sheet metals; machinery connected therewith; application of such metals to various useful purposes. (*For gasometers.*)	2662	17th Nov. 1853	John Clark, junior.
Use and preparation of certain solid and liquid substances for neutralizing, decomposing, and absorbing noxious and fetid gases.	2693	19th Nov. 1853	Thomas Isaac Dimsdale.
Apparatus for the production of carburetted hydrogen gas.	2702	21st Nov. 1853	Sir John Scott Lillie.
Apparatus used when manufactnring gas, which apparatus, or part of which, is also applicable when transmitting gas from one place to another. *See also* "FURNACES, &c." „ "RETORTS, &c."	2939	17th Dec. 1853	George Anderson.
GAUGES; SAFETY-FLOATS; REGISTERS; MEASURING POWER.			
Atmospheric engines - - - - - (*Regulating pressure.*)	20	5th Jan. 1853	William Edward Newton.
Steam-generators - - - - - -	185	19th Jan. 1853	Celestin Malo.
Barometer and steam-gauge - - -	196	26th Jan. 1853	Antoine Galy Cazalat.
Steam engines and boilers - - - - (*Regulating pressure.*)	208	27th Jan. 1853	William Galloway. John Galloway.
Improvements in locomotives, part of which improvements are applicable to other steam-engines.	533	3rd March 1853	Auguste Edouard Loradoux Bellford.
A pressure-governor or self-acting apparatus for regulating the flow of water.	564	7th March 1853	James Gascoigne Lynde, junior.
Illuminating-apparatus; production of light - (*Safety-float in gas-making.*)	570	7th March 1853	Joseph John William Watson.
A hydro-dynamic battery or new electro-magnetic apparatus which with its products is applicable to the production of motive-power, light, and heat. (*Glass tube gauge for indicating the height of the liquid.*)	575	7th March 1853	Augustino Carosio.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAUGES, &c.—*continued.*			
Improvements in and applicable to boilers or apparatus for generating steam, and in apparatus connected therewith. (*Safety-plug.*)	959	21st April 1853	Thomas Dunn.
Instruments for measuring the pressure and temperature of air, steam, and other fluids.	989	25th April 1853	Charles Léon Desbordes.
Certain improvements in wash-stands and baths, part of which improvements are also applicable to table fountains. (*Dial for indicating the quantity of a spring wound up.*)	1011	27th April 1853	James Dinning.
Steam-boilers; appendages thereto - - - -	1021	27th April 1853	Thomas Culpin.
Improvements in steam-engines, which improvements are also applicable to the machinery or apparatus connected to steam-boilers.	1194	14th May 1853	Thomas Stephen Holt.
Machinery or apparatus applicable for pumping water and supplying steam boilers with water, and maintaining the water therein at a proper level.	1239	19th May 1853	William Edward Newton.
Machinery or apparatus for measuring and indicating the power exerted by engines, and also the force required to propel machinery, carriages, or ploughs.	1253	20th May 1853	Edward Hammond Bentall.
Regulating the pressure of steam - - - -	1295	26th May 1853	Alphonse Réné le Mire de Normandy.
Pressure-indicators - - - - -	1383	4th June 1853	Christian Schiele.
An engine-meter or instrument for indicating the number of strokes of an engine.	1579	30th June 1853	Andrew Peddie How.
Apparatus for ascertaining and indicating the supply of water in steam-boilers.	1747	25th July 1853	Robert Bitten.
Apparatus for the purpose of preventing fraud in drawing off liquids.	1753	26th July 1853	John Dawson.
Pressure-gauges - - - - - -	1959	23rd Aug. 1853	James Webster.
Steam-boilers; apparatus applicable thereto and to be used therewith - - - - -	2029	2nd Sept. 1853	John Tayler. James Griffiths. Thomas Lees.
Pressure-governor or self-acting apparatus for regulating the flow of water.	2064	8th Sept. 1853	James Gascoigne Lynde, junior.
Manufacture of artificial vinegar - - - - (*Liquid gauge.*)	2224	28th Sept. 1853	Joseph Fermont Van Waesberghe.
Machinery for cutting metal or other substances - (*Registering.*)	2225	28th Sept. 1853	William Edward Newton.
Thermometers and other like indicators - -	2280	5th Oct. 1853	William Littell Tizard.
Water-gauges for steam-boilers - - -	2335	11th Oct. 1853	James Webster.
Apparatus for measuring the pressure of air, steam, gas, and liquids.	2363	13th Oct. 1853	Theodore Benoit Waree.
An elastic spring contained in a cylindric tube or tubular case, the lid of which moves up and down according to the pressure. (*For setting reels.*)	2443	22nd Oct. 1853	Jean François Mermet.
Apparatus for indicating water in the holds of vessels.	2484	27th Oct. 1853	Richards Richards.
Apparatus for ascertaining and indicating the depth of water in the hold of a ship or vessel.	2504	29th Oct. 1853	George Joseph Gladstone.
Steam-engines; apparatus for indicating the pressure of steam.	2577	5th Nov. 1853	William Beckett Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAUGES, &c.—*continued.*			
Stamps and presses, parts of which may be applied to other purposes - - - - - (*Registering apparatus.*)	2631	14th Nov. 1853	John Singleton Copley Hill. Edwin Cottrill.
Instruments and apparatus for inditating or measuring weights and pressures.	2862	9th Dec. 1853	Andrew Shanks.
Distillation of organic substances; obtaining products therefrom.	2868	9th Dec. 1853	John Chisholm.
Improvements in or addition to sugar-basins - (*Indicating the quantity taken out.*)	2893	13th Dec. 1853	André Gaspard Gueadron.
Machinery or apparatus for winding yarns or threads into spools or bobbins. (*Wheel for measuring the quantity of thread wound.*)	2901	14th Dec. 1853	John Wibberley.
Governors for regulating the pressure of steam, gas, and other fluids or liquids.	3002	28th Dec. 1853	John Parkinson.
GLASS (*Making and Ornamenting*); **LIQUID SILEX.**			
Method of ornamenting articles of glass, enamel, and earthenware.	183	25th Jan. 1853	Amédée Francois Rémond.
Manufacture of crown, sheet, plate, and bottle glass	762	30th March 1853	James Bowron.
Manufacture of glass and porcelain - -	803	4th April 1853	Francis Steigewald.
Production of ornamental surfaces in glass and similar materials. (*Parti-coloured designs.*)	828	6th April 1853	William Johnson.
Producing ornamental glass surfaces - - -	858	9th April 1853	Adolphe Marius Alexandre Iglesia.
Manufacture of paste and enamel buttons - - (*Forming easily fusible silicate.*)	899	14th April 1853	Constant Jouffroy Duméry.
Manufacture of glass - - - - -	1073	3rd May 1853	Robert Walter Swinburne.
Apparatus or machinery to be used in the manufacture of glass.	1204	14th May 1853	Robert Walter Swinburne.
Manufacture of certain compounds containing phosphoric acid. (*For making glass.*)	1208	16th May 1853	Thomas Richardson.
Manufacture of glasshouse pots - - - -	1486	18th June 1853	Edgar Breffit.
Manufacture of glass - - - - -	1604	5th July 1853	George Mackay.
Method of forming designs and patterns upon glass and other surfaces.	1714	19th July 1853	Charles Breese.
Gilding glass and such like materials - -	1937	18th Aug. 1853	William Cornelius.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Application of the processesof lithographic and zincographic printing of words, patterns, designs and marks, on metal, glass, wood, and other hard and unyielding substances, in sheets, slabs, or flat pieces, with or without the intervention of paper or other flexible material	2115	13th Sept. 1853	Charles Frederick Adams. William Gee. George Davis.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GLASS, &c.—*continued.*			
Means of ornamenting glass - - -	2754	25th Nov. 1853	Emanuel Barthélemy. Tony Petitjean. Jean Pierre Bourquin.
Manufacturing liquid quartz or silex to be used in the manufacture of certain compositions for ornamental and useful purposes. (*For staining glass.*)	2991	24th Dec. 1853	Harris Hardinge.
For Glass-kilns—*see* "OVENS, &c." *See also* "FURNACES."			
GLASS AS APPLIED IN VARIOUS MANUFACTURES.			
Taps and other apparatus for filtering and drawing off liquids.	1	1st Jan. 1853	William Wilkinson.
Making a tesselated pavement - - -	3	1st Jan. 1853	John Addison. Henry S. Eicke.
Manufacture of a vitrified substance and its application alone or in combination with mineral, earthy, and plastic substances, to various useful purposes in the arts, and for certain other new applications of known plastic substances.	7	1st Jan. 1853	Joseph Brough.
Improvements in certain kinds of spoons and ladles.	91	13th Jan. 1853	Charles Bullivant. Charles Hackney.
Electric telegraphs; instruments used in connection therewith. (*Insulators.*)	96	13th Jan. 1853	John Walker Wilkins.
Manufacture of spoons and ladles - -	98	14th Jan. 1853	Richard Taylor. Hezekiah Henry Salt.
Ornamenting walls, ceilings, and other surfaces -	144	20th Jan. 1853	William Riddle.
Closing or stoppering bottles, jars, and other receptacles.	215	28th Jan. 1853	Joseph Scott.
Mode of applying and combining ornamented glass in the manufacture of useful and ornamental articles.	265	31st Jan. 1853	John Pinkerton.
Improvements in candles and machinery or apparatus for making thereof. (*Glass moulds.*)	271	1st Feb. 1853	Edwin Whele.
Construction and mode of closing scent and other bottles.	369	12th Feb. 1853	Thomas Robert Mellish.
Door or finger plate - - - - -	524	2nd March 1853	Alfred Augustus de Reginald Hely.
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electrolytic action. (*Making battery cells of glass.*)	634	14th March 1853	William Edwards Staite.
Application of porcelain and similar materials to ornamenting purposes. (*Coating with glass &c.*)	637	14th March 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GLASS AS APPLIED, &c.—*continued.*			
Apparatus for manufacturing moulded candles (*Glass moulds.*)	985	23rd April 1853	George Fergusson Wilson. William Henry Hatcher. John Jackson.
Manufacture of blinds, shades, and other vitreous substances.	1392	6th June 1853	Delabere Barker.
Application and combination of glass, porcelain, stoneware, earthenware, terra-cotta, composition in plaster called scagliola and majolica ware.	1480	17th June 1853	James Hogg.
Improvements in pumps	1488	18th June 1853	Thomas Adamson. William Adamson.
Packing goods so as to increase the facility and safety of their transmission from place to place (*Lining cases.*)	1674	14th July 1853	André Louis Jules le Chevalier St. Andre.
Manufacture of pens, pencils, and instruments used when writing, marking, and drawing.	1693	15th July 1853	Charles Goodyear.
Manufacture of tiles for roofing	1766	27th July 1853	Peter Armand le Comte de Fontainemoreau.
Combination of glass with iron or other metals, to serve for the construction of floors, walls, roofs or parts thereof, or of windows for buildings, and also of translucent pavements, lights for subterranean apartments, and for any purpose for which a translucent medium possessing great strength is desirable.	1840	6th Aug. 1853	Auguste Edouard Loradoux Bellford.
Combining glass and other materials	1850	9th Aug. 1853	Thomas Young Hall.
Desks, work-boxes, dressing-cases, tea-caddies, and similar articles; arrangements and fittings thereof.	1859	10th Aug. 1853	John George Taylor.
Improvements in the working barrels of pumps, which improvements are also applicable to lining other metallic tubes.	2024	31st Aug. 1853	John Phillips Grazebrook.
Construction of air-furnaces; partly applicable to other furnaces. (*Coating.*)	2051	6th Sept. 1853	Henry Wilkinson.
Construction and manufacture of windows (*Frames.*)	2455	25th Oct. 1853	Thomas Summerfield.
Steps or bearings of the axles or shafts of gas-meters.	2604	10th Nov. 1853	James Stevens.
Bearings for machinery	2607	11th Nov. 1853	William Parker.
Certain improvements in kitchen sinks (*Coating.*)	2763	26th Nov. 1853	Thomas Chambers. John Chambers.
Moderator lamp, or lamps of a similar principle (*Glass cone round the shaft.*)	2999	27th Dec. 1853	Samuel Sedgwick. Thomas Dawson.
Insulators for insulating the wires or rods employed for conducting or transmitting electricity.	3007	28th Dec. 1853	Richard Green.
GLOVES.			
Improvements in circular frames and in the fabrics and articles produced thereon.	45	7th Jan. 1853	Thomas Pape.
Improved nets and other textile fabrics to be used for gloves and other purposes; machinery to be employed in the manufacture thereof	72	11th Jan. 1853	James Thornton. John Thornton. Albert Thornton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GLOVES—*continued.*			
Method of dressing lamb-skin leather and cleaning the wool therefrom (*For making gloves.*)	230	29th Jan. 1853	John Ryall Corry. James Barrett Corry.
Construction of buttons; mode of applying the same to gloves and other articles of dress	589	8th March 1853	Thomas Glover.
Manufacture of lined gloves	2833	6th Dec. 1853	Thomas Mills.
GOLD-BEATING.			
Machinery for beating gold and other laminæ of metal	862	11th April 1853	Robert Bostwick Ruggles. Lemuel Wright Serrell.
GRINDING AND CRUSHING MINERALS, PAINTS, BONES, PEAT, WOOD, &c.			
Producing compositions or combinations of bituminous, resinous, and gummy matters, and thereby obtaining products useful in the arts or manufactures.	496	26th Feb. 1853	Admiral the Earl of Dundonald.
Manufacture of glass and porcelain (*Pulverizing.*)	803	4th April 1853	Francis Steigewald.
Grinding and pulverizing gums, gum resins, and other drugs and articles of similar character.	872	12th April 1853	Richard Archibald Brooman.
Manufacture of paste and enamel buttons	899	14th April 1853	Constant Jouffroy Duméry.
Reducing emery, glass, and other like substances	1233	18th May 1853	John Oakey.
Improvements in dryers; preparing drying oils for oil-paints, varnishes, and other uses.	1425	11th June 1853	Christopher Binks.
Mill and apparatus for crushing and grinding bones and other compounds.	1533	23rd June 1853	Masta Joscelin Cooke.
Machinery or apparatus for grinding or levigating various substances.	1545	24th June 1853	Henry Goodall.
Manufacture of paints, pigments, and materials for house painting, paper-staining, and decorative purposes generally.	1667	13th July 1853	Arnold Morton.
Mill for grinding	1758	26th July 1853	Thomas Buxton.
Preparation of a black powder from coal, applicable to the manufacture of paints, blacking, and various other purposes.	1900	13th Aug. 1853	John Gwynne.
Machinery for reducing wood and other vegetable fibres to pulp, applicable to the manufacture of paper, pasteboard, millboard, papier-mâché mouldings, and other like purposes.	1911	15th Aug. 1853	Richard Archibald Brooman.
Conversion of peat into charcoal	2070	8th Sept. 1853	William Hall.
Machinery for crushing and grinding mineral and other substances.	2113	12th Sept. 1853	Alfred Vincent Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GRINDING, &c.—*continued.*			
Treatment of minerals for the purpose of separating impurities therefrom. (*Shale from coal.*)	2185	20th Sept. 1853	Joseph Gibbs.
Millstones for grinding minerals &c. - -	2569	5th Nov. 1853	John Smith.
Machinery for grinding or crushing animal, vegetable, and mineral substances.	2891	13th Dec. 1853	William Frederick Plummer.
For Crushing Ores—*see* "QUARTZ, &c."			
GRINDING, CRUSHING, SPLITTING, DRESSING, HULLING (*Corn, Rice, Seeds, and Sugar-canes*); **MILLSTONES.**			
A smut-machine - - - - - (*Communicated by Leonard Smith.*)	182	25th Jan. 1853	Warren Fisk Shattuck.
Treatment of corn and other grains, and more especially in all that concerns washing, drying, grinding, curing, and preserving them - -	625	12th March 1853	Nicolas Auguste Eugène Millon. Leopold Mouren.
Grinding wheat and other grain - - -	836	7th April 1853	William Henry Wells. Edward Mann. John Harman.
Machinery for crushing sugar-canes - -	851	8th April 1853	Henry Oliver Robinson.
Mills for grinding wheat and other grain - -	900	14th April 1853	Charles Lowe.
Machinery for dressing mill-stones - - -	1083	3rd May 1853	William Edward Newton.
Mills for grinding wheat and other grain - -	1368	3rd June 1853	Richard Robbins.
Mills and apparatus for grinding and dressing corn and various substances.	1374	4th June 1853	Joseph Gyde.
Grinding wheat and other grain - - -	1498	18th June 1853	George Young.
Mill and apparatus for crushing and grinding grain and other compounds.	1533	23rd June 1853	Masta Joscelin Cooke.
Production or manufacture of flour - - - (*Communicated by Monsieur Buiroz.*)	1541	24th June 1853	John Henry Johnson.
Apparatus for crushing grain, seeds, or pulse -	1606	5th July 1853	George Arthur Biddell.
Mill for grinding - - - - - -	1758	26th July 1853	Thomas Buxton.
Machinery for hulling and dressing paddy or rice -	1837	6th Aug. 1853	Martin Zadick Just.
Obtaining motive-power - - - - (*Turning coffee-mills.*)	1868	11th Aug. 1853	Thomas Dewsnup.
Mills for grinding corn and other grain - -	1915	16th Aug. 1853	Joseph Martin.
Machinery for cleaning bran and other offal obtained during the manufacture of flour.	2013	30th Aug. 1853	William Edward Newton.
Grinding-mills for farm and other purposes -	2106	12th Sept. 1853	Edward Rush Turner.
Machinery for separating flour, shorts, and dustings from bran as it comes from the bolting apparatus.	2135	14th Sept. 1853	Moses Poole.
Mills for grinding - - - - - - (*Communicated by Messrs. Fromont and Son.*)	2447	22nd Oct. 1853	John Henry Johnson.
Millstones for grinding corn, seeds &c. - -	2569	5th Nov. 1853	John Smith.
Mills for grinding corn and other substances -	2851	8th Dec. 1853	Joseph Robinson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GRINDING, &c.—*continued.*			
Machinery for grinding or crushing vegetable substances, &c.	2891	13th Dec. 1853	William Frederick Plummer.
Grinding grain and dressing grist; grinding generally	2950	19th Dec. 1853	William Crossby.
Machinery for the cleaning and hulling or dressing of rice, wheat, and other grain.	2992	24th Dec. 1853	Gustav Adolph Buchholz.
GRINDING, SHARPENING, POLISHING; HONES AND STROPS; POLISHING-POWDERS			
Grinding-machine	198	26th Jan. 1853	Thomas Frederick Cashin. Joseph Stirk.
Improvements which are in part applicable to the manufacture of a polishing-powder.	500	28th Feb. 1853	Martyn John Roberts.
Manufacturing coated metal (*Planishing.*)	553	4th March 1853	John Davie Morries Stirling.
Apparatus for grinding edge-tools and other articles	621	12th March 1853	William Muir.
Grinding-stones and whet-stones	671	18th March 1853	John Haskett.
Machinery or apparatus for grinding or setting the surfaces of cylinders and rollers employed in carding-engines	685	19th March 1853	Samuel Radcliffe. Knight William Whitehead.
Apparatus for sharpening razors	789	2nd April 1853	Nicolas Ferdinand Barthelemy.
Production of ornamental surfaces in glass, porcelain, metals, and similar materials. (*Making impressed surfaces level by grinding.*)	828	6th April 1853	William Johnson.
Improvements in brushes (*Pointing bristles &c.*)	916	14th April 1853	George Titterton.
Manufacture of articles of marble (*Polishing.*)	1188	13th May 1853	John Knowles. Edward Taylor Bellhouse.
Apparatus or machinery to be used in the manufacture of glass. (*Polishing.*)	1204	14th May 1853	Robert Walter Swinburne.
Machinery and apparatus for grinding and turning metals	1502	20th June 1853	Hiram Barker. Francis Holt.
Manufacture of lasts; machinery connected therewith;—partly applicable to other like purposes of eccentric turning.	1564	29th June 1853	Thomas Edward Irons.
Manufacture of glass (*Polishing.*)	1604	5th July 1853	George Mackay.
Machinery or apparatus for grinding or setting "doctors" used in calico and other similar printing-machinery.	2117	13th Sept. 1853	Adolphus Sington.
Mode of manufacturing brushes; machinery for applying the same to the purposes of polishing and cleaning	2165	17th Sept. 1853	Richard Litherland. Thomas Picton.
Certain improved processes for separating emery from other matters.	2191	22nd Sept. 1853	Frederick Crace Calvert.
Improvements in lathes (*For facing work.*)	2204	24th Sept. 1853	Alexander Dalgety.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GRINDING, &c.—*continued.*			
Machinery for spinning and doubling cotton and other fibrous substances, and for grinding cards - - - - - -	2251	1st Oct. 1853	Robert Halliwell. William Johnson.
Polishing and brightening surface - -	2277	5th Oct. 1853	Samuel Leake Worth. Agmond Dishin Vesey Canavan.
Hardening and tempering steel; grinding, glazing, buffing, and brushing steel and other metallic articles.	2528	1st Nov. 1853	James Chesterman.
Manufacture of fibres made of silk, cotton-wool, flax, hemp, straw, grasses, fibres, mohair and other hair, spun-glass, and enamelled, glazed, or plain wire; application of some of those materials; machinery or apparatus connected therewith. (*Sharpening cutters.*)	2602	10th Nov. 1853	William Pidding.
Machinery for the manufacture of optical lenses - (*Grinding and polishing.*)	2608	11th Nov. 1853	Salomon Sturm.
Instruments for cutting out parts of garments and other articles; grinding and sharpening cutters for the same.	2717	22nd Nov. 1853	William Pegg.
Combination and manufacture of composition grinding-wheels, hones, and other grinding bodies.	2889	13th Dec. 1853	George Kerr Hannay.
GUNPOWDER; EXPLOSIVE COMPOUNDS.			
Application of explosive compounds - - (*As primers.*)	306	4th Feb. 1853	George Winiwarter.
Improvements in explosive compounds &c. -	1447	15th June 1853	Charles Evan Reeves.
Preparation of a black powder from coal; application thereof to the manufacture of paints, blacking, and various other purposes. (*For gunpowder.*)	1900	13th Aug. 1853	John Gwynne.
An improvement in "blasting powder" for mining and other operations of a similar nature.	2910	15th Dec. 1853	Auguste Edouard Loradoux Bellford.
GUTTA-PERCHA AND INDIA-RUBBER (*Treating, Preparing, Dissolving; also Compounds and Substitutes*).			
Manufacturing and treating caoutchouc - -	22	5th Jan. 1853	Gustave Eugène Michel Gérard.
Treatment or manufacture of caoutchouc - -	467	24th Feb. 1853	William Johnson.
Producing compositions or combinations of bituminous, resinous, and gummy matters, and thereby obtaining products useful in the arts and manufactures.	496	26th Feb. 1853	Admiral the Earl of Dundonald.
Treating sheets of caoutchouc or gutta-percha so as to render the same fit for ornamental coverings. (*Stretching and perforating.*)	598	9th March 1853	William Pidding.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Machinery for masticating, kneading, or grinding india-rubber, gutta-percha, and other matters.	842	7th April 1853	Christopher Nickels.
Certain new combinations of gutta-percha with other materials; method of applying such for use.	906	14th April 1853	John Wallace Duncan.
Casting metals and moulding or forming other materials.	995	25th April 1853	Julian Bernard.
Machinery for masticating, kneading, or grinding india-rubber, gutta-percha, and other matters.	1121	6th May 1853	Christopher Nickels.
Abstracting sulphur and other matters from vulcanized india-rubber - - - -	1461	16th June 1853	William Christopher. Gustavus Gidley.
Machinery for converting caoutchouc into circular blocks or cylinders, and for manufacturing the same into sheets. (*Communicated by François Perroncel.*)	1592	2nd July 1853	Richard Archibald Brooman.
Preparing india-rubber - - - - -	1694	15th July 1853	Charles Goodyear.
Compounds which may be employed for mouldings, frames, and many purposes to which gutta-percha and other like substances are applicable.	1885	12th Aug. 1853	Richard Archibald Brooman.
Manufacture or treatment of gutta percha; application thereof. (*Communicated by Louis François Alexandre Deseille.*)	1904	13th Aug. 1853	John Henry Johnson.
Means of depriving caoutchouc of all unpleasant odour, and of imparting to it various agreeable perfumes.	1982	26th Aug. 1853	Eugène de Varroc.
Combining india-rubber with other matters for writing, marking, and drawing.	2007	30th Aug. 1853	Charles Goodyear.
Manufacture and ornamenting or coating of articles when compounds containing india-rubber are used.	2009	30th Aug. 1853	Charles Goodyear.
Manufacture or treatment of gutta-percha -	2404	18th Oct. 1853	Emory Rider.
Making india-rubber solution for waterproofing cloths or other articles, without the offensive smell produced by the use of naphtha, turpentine, oils &c. - - - - - -	2406	19th Oct. 1853	Gustavus Gidley. John Bell Muschamp.
Treatment or manufacture of gutta-percha, and application thereof. (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Preparing solvents for india-rubber and gutta-percha; rendering waterproof fabrics free from odour.	2648	15th Nov. 1853	Joseph Fry.
Treatment or manufacture of caoutchouc - - (*Communicated by Charles Eugène François Guibal and Louis Philippe Bernard Edouard Cumenge.*)	2798	1st Dec. 1853	John Henry Johnson.
Treatment and manufacture of india-rubber -	2933	16th Dec. 1853	Charles Goodyear.
Belts or bands for driving machinery, for use in mines and for other purposes. (*Compounds for varnishing.*)	2936	16th Dec. 1853	Robert William Waithman.
Compositions to be employed as substitutes for caoutchouc, gutta-percha, and certain fatty bodies.	3045	31st Dec. 1853	Stanislas Tranquile Modeste Sorel.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA AND INDIA-RUBBER AS APPLIED IN VARIOUS MANUFACTURES.			
Taps and other apparatus for filtering and drawing off liquids.	1	1st Jan. 1853	William Wilkinson.
Vulcanized india-rubber springs for trowsers and breeches, with instructions to adjust the same.	2	1st Jan. 1853	Henry Bentley.
Manufacture of oils; treatment thereof for lubricating purposes.	8	1st Jan. 1853	John Henry Johnson.
Manufacture and treating caoutchouc - - (*Tubes and thread.*)	22	5th Jan. 1853	Gustave Eugène Michel Gérard.
Illuminating buoys and beacons in harbours, roadsteads, and rivers.	31	6th Jan. 1853	William Louis Sheringham.
Manufacture and treatment of leather either alone or in combination with other materials. (*For boot-soles, flat bands, bags, boxes, hose, and harness.*)	36	6th Jan. 1853	Robert Whinery.
Boots, shoes, and that kind of spatterdashes termed antigropelos - - - - - -	59	8th Jan. 1853	Francis Parker. William Dicks.
Rendering bottles, jars, and other like receptacles air and water tight; raising and measuring the liquid contents thereof.	62	10th Jan. 1853	Charles Stewart Duncan.
Improved nets and other textile fabrics to be used for gloves and other purposes; machinery to be employed in the manufacture thereof - -	72	11th Jan. 1853	James Thornton. John Thornton. Albert Thornton.
Manufacture of artificial leather - - -	83	12th Jan. 1853	George Augustus Huddart.
Protecting vessels and exposed surfaces from injury or decay.	95	13th Jan. 1853	George Fife.
Apparatus for refrigerating - - -	106	15th Jan. 1853	Hippolyte Charles Vion.
Ornamenting walls, ceilings, and other surfaces -	144	20th Jan. 1853	William Riddle.
Safety-lamps, partly applicable to other lamps -	166	22nd Jan. 1853	George Fife.
Reaping all kinds of corn - - - - -	171	24th Jan. 1853	Henry Brinsmead.
Method of communicating between the guard and driver of a railway train - - -	172	24th Jan. 1853	Howard Ashton Holden. Edward Bull. Alfred Knight.
Manufacture of printing-surfaces - - -	189	25th Jan. 1853	Alfred Vincent Newton.
Optical and mathematical instruments - -	195	26th Jan. 1853	Isaac Davis.
Barometer and steam-gauge - - - - -	196	26th Jan. 1853	Antoine Galy Cazalat.
Closing or stoppering bottles, jars, and other receptacles.	215	28th Jan. 1853	Joseph Scott.
Improvements in cables - - - - - -	221	28th Jan. 1853	Richard Archibald Brooman.
Mode of preventing accidents by improved signals on railways;—partly applicable to blast-furnaces.	225	29th Jan. 1853	William Archer.
Transmitting motive-power to machinery; regulating the action of rotary machines.	239	29th Jan. 1853	William Constable.
Manufacture of hats, caps, and bonnets;—applicable to other articles of wearing-apparel.	268	31st Jan. 1853	Thomas Charles Clarkson.
Stoppering apparatus for bottles containing liquids, of which small quantities are generally poured out at a time.	282	2nd Feb. 1853	Auguste Edouard Loradoux Bellford.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
A new application of a system to render boots and shoes waterproof without sewing or nailing whatever, applicable also to render waterproof hats, caps, and general hatting; also the application of machines to the manufacturing of general shoemaking and hatting.	296	3rd Feb. 1853	Benoit Dulaurier.
Railway-carriages	310	4th Feb. 1853	Jacob Vale Asbury.
An improved boot, particularly suitable for the use of emigrants and persons at sea.	311	4th Feb. 1853	William Edgar.
Primers for fire-arms	319	5th Feb. 1853	Antoine Wollowicz.
Garments for travelling	325	5th Feb. 1853	Henry John Nicoll.
Galvanic batteries	339	8th Feb. 1853	Thomas Allan.
Stopping bottles and other vessels	359	10th Feb. 1853	Robert Ash.
Construction and mode of closing scent and other bottles.	369	12th Feb. 1853	Thomas Robert Mellish.
Fire-arms	371	12th Feb. 1853	George Winiwarter.
Treatment of oleaginous, fatty, or gelatinous substances, for purifying, decolourizing, compounding, or clarifying the same.	377	12th Feb. 1853	William Pidding.
Means of communicating between the passengers, guard, and driver of a railway-train;—partly applicable to communicating on vessels.	378	12th Feb. 1853	Charles Hadley.
Apparatus to be employed for veneering surfaces	379	14th Feb. 1853	William Edward Newton.
Manufacture of tiles for roofing	383	14th Feb. 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of articles made of gutta-percha	395	15th Feb. 1853	Alphonse Rene le Mire de Normandy.
Bookbinding	406	16th Feb. 1853	Edouard Sy.
Manufacture of printing-surfaces	410	16th Feb. 1853	Alfred Vincent Newton.
Coverings for the feet of bipeds or quadrupeds	442	21st Feb. 1853	William Pidding.
An improved bath, which can also be used as a life-boat.	446	21st Feb. 1853	Benjamin Barton.
Manufacture of ropes, bands, straps, and cords	449	21st Feb. 1853	William Wilkinson.
Manufacture of fire-arms	452	22nd Feb. 1853	George Winiwarter.
Machinery or apparatus for retarding or stopping railway-trains;—also applicable as a signal or communication from one part of a train to another	465	24th Feb. 1853	Henry Walmsley. Thomas Critchley.
Preserving milk and other fluids	477	25th Feb. 1853	William Symington.
Heating and making cards (*The teeth are set in india-rubber.*)	505	28th Feb. 1853	Samuel Cunliffe Lister.
Preserving wood from decay	508	1st March 1853	John Bethell.
Making paddle-wheels for vessels propelled by motive-power—"Cylinder paddle-wheel." (*The floats are lined with gutta-percha.*)	512	1st March 1853	William Rowett.
The application of certain materials to the manufacture of coffin furniture.	531	3rd March 1853	Charles Humpage.
Stretching fabrics (*Using bands of gutta-percha.*)	561	5th March 1853	John Hirst, junior. William Mitchell.
A hydro-dynamic battery or new electro-magnetic apparatus, which with its products is applicable to the production of motive-power, light, and heat. (*Lining the cells.*)	575	7th March 1853	Augustino Carosio.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Machinery used in washing wool - - - (*Covering the rollers.*)	584	8th March 1853	Samuel Cunliffe Lister.
Strap or band for connecting together certain parts of harness and saddlery;—applicable also to other purposes where straps or bands are used.	594	9th March 1853	Samuel Blackwell.
Saddlery and harness - - - - -	595	9th March 1853	Samuel Blackwell.
Girths or pads for retaining saddles in their places -	612	10th March 1853	The Honourable William Erskine Cochrane. William Marshall Cochrane.
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electrolytic action.) (*Battery valves.*)	634	14th March 1853	William Edwards Staite.
Manufacturing casks, vats, and other like vessels; machinery or apparatus to be employed for such purpose - - - - - (*Disc coverings.*)	636	14th March 1853	Bennett Alfred Burton. Henry Mortimer Burton.
Preparing lubricating matters - - -	656	16th March1853	Edward Nickels.
Improvements in printing - - - (*Moulds or forms.*)	696	21st March 1853	John Stather.
Engines or apparatus for raising and forcing liquids and fluids. (*Receiver.*)	725	26th March1853	Joseph Morgan.
Improvements in railway carriages - - - (*Bearing-springs.*)	729	26th March 1853	Charles de Bergue.
Cocks for drawing off beer or other liquids -	749	29th March 1853	Isaac Rider.
Permanent way of railways - - - (*Caoutchouc between the sleeper and chair.*)	755	29th March 1853	John Pym.
Boots, shoes, and clogs; machinery or apparatus and materials connected therewith. (*Charging wooden heels.*)	757	29th March 1853	Julian Bernard.
Weaving narrow fabrics - - - - (*India-rubber warp.*)	763	30th March 1853	Christopher Nickels.
Certain improvements in the production of aërated liquids. (*Vulcanized caoutchouc washer.*)	766	30th March 1853	Joseph Xavier Villiet, senior.
Improvements in weaving - - - (*Harness straining-cords.*)	767	30th March 1853	James Houston.
Apparatus for measuring gas, water, and other fluids; —also applicable for obtaining motive power - (*India-rubber tube.*)	773	31st March 1853	George Hanson. David Chadwick.
An improved piston - - - -	782	1st April 1853	Robert Evans Peterson.
Improvements in locomotive-engines - - (*Driving-bands.*)	786	2nd April 1853	Sir James Caleb Anderson, Baronet.
Apparatus for sharpening razors - - -	789	2nd April 1853	Nicolas Ferdinand Barthelemy.
Manufacture of woven, textile, or other fabrics; machinery or apparatus connected therewith. (*Saturating with india-rubber solution.*)	817	5th April 1853	William Pidding.
Preparation or treatment of twine or other threads, or cuttings of papers or other waste, for the production of useful and ornamental articles. (*Inserting fibres &c. in india-rubber threads.*)	821	5th April 1853	William Pidding.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Manufacture of safety paper (*Gutta-percha matrix for producing water-marks.*)	829	6th April 1853	William Johnson.
Garments; sewing or uniting the seams of the same	869	11th April 1853	Donald Nicolk.
Filling vessels with aërated waters; apparatus employed therein. (*Washers.*)	876	12th April 1853	Auguste Mondollot.
Apparatus for applying metallic capsules	885	12th April 1853	Alexander Edward Dudley Knox Archer.
Cleansing of pans and other culinary utensils	905	14th April 1853	Thomas Haigh.
Certain new combinations of gutta-percha with other materials; method of applying such for use. (*Cements; covers; boxes.*)	906	14th April 1853	John Wallace Duncan.
Improvements in cocks	928	16th April 1853	Henry Wilks.
Improvements in coating tubes	942	19th April 1853	John Chatterton.
Improvements in galvanic batteries (*Troughs.*)	944	19th April 1853	John Fuller.
Manufacture of boots and shoes whereby great ease is secured to the wearer.	946	19th April 1853	Thomas Day.
Ocean floats, which are designed to save lives and light treasures from shipwreck.	958	21st April 1853	Anthony Deale.
Permanent way of railways (*Securing the chairs.*)	1014	27th April 1853	Joseph Walter Gale.
Steam-boilers; appendages thereto	1021	27th April 1853	Thomas Culpin.
Machinery or apparatus for printing or staining woven fabrics and paper	1031	28th April 1853	James Berry. Thomas Booth.
Machinery for drawing, roving, and spinning flax, hemp, and other fibrous substances	1032	28th April 1853	Peter Fairbairn. Ferdinand Kaselowsky.
Travelling packages	1037	29th April 1853	George Thomas Day.
Treatment of natural and artificial stone, and of articles composed of porous cements or plaster for the purpose of hardening and colouring the same.	1051	30th April 1853	Barnabas Barrett.
Combining india-rubber with certain metals	1095	4th May 1853	Charles Goodyear.
Saddlery and harness	1106	5th May 1853	Matthias Edward Boura.
Improvements in carriage springs	1112	6th May 1853	Charles William Bell.
Manufacture of metallic covers or seals for bottles, jars, and other like vessels; applying or affixing them.	1119	6th May 1853	George William Jacob.
Mode of communicating or signalling between the guards and engine drivers on a railway-train;—also applicable to other purposes.	1126	7th May 1853	Christopher Richard Norris Palmer.
Certain improvements in steam-engines	1202	14th May 1853	Peter Armand le Comte de Fontainemoreau.
Improvements in knapsacks	1203	14th May 1853	John Drumgoole Brady.
An improved gun	1211	16th May 1853	Moreton Hassall Phillips.
Mode and apparatus for working the machinery in factories and ships in connection with the steam-engines or steam-power now used therein.	1221	18th May 1853	Christopher Richard Norris Palmer.
Manufacture of covering materials for houses and other structures and surfaces.	1238	19th May 1853	Thomas Grahame.
Improvement in canisters	1241	19th May 1853	John Ames Gilbert.
Plastic compound applicable to various ornamental and useful purposes.	1260	21st May 1853	Henri Joseph Scoutetten.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Elastic webbing or fabric - - - -	1263	23rd May 1853	Samuel Alfred Carpenter.
Apparatus for bottling or supplying vessels with fluids.	1269	23rd May 1853	John Harcourt Browne.
Manufacture of hair trimmings - - -	1275	25th May 1853	William Babb.
Raising and lowering windows, shuters, blinds, and similar appendages.	1279	25th May 1853	Frederick Russell.
Regulating the pressure of steam - - -	1295	26th May 1853	Alphonse Rene le Mire de Normandy.
Cases or receptacles for containing a composition shaving-soap or other articles.	1304	27th May 1853	Samuel Smith Shipley.
Carding wool and other fibrous substances; manufacture of cards for that purpose.	1318	28th May 1853	Daniel Bateman.
Elastic spring beds, mattresses, cushions, and all kinds of spring stuffing for upholstery work generally, making them lighter and more portable.	1325	30th May 1853	Joseph Brown.
Combining materials for making a more perfect fabric for suction hose, mill-bands, harness, and for all other similar purposes to which the same may be applied.	1326	30th May 1853	George Wells.
Treating or preparing yarns or threads - -	1330	30th May 1853	William Green.
Stoves, grates, or fire-places - - -	1334	31st May 1853	William Brookes.
Manufacture of soles for boots, shoes, and other coverings for the feet.	1360	2nd June 1853	William Edward Newton.
Improvements in inkstands - - -	1367	3rd June 1853	Thomas Barnabas Daft.
Manufacture of blinds, shades, and other vitreous substances; method or methods of raising, lowering, folding, and regulating such blinds, shades, and other screens.	1392	6th June 1853	Delabere Barker.
Application, construction, and arrangement of springs for carriages and such like purposes.	1394	7th June 1853	George Bazett Colvin Leverson.
Manufacture of detonating or percussion caps -	1404	8th June 1853	John Horrocks, junior. James Dunlop Horrocks.
Treating fabrics suitable for floor-cloths, covers, and such like articles.	1414	9th June 1853	William Brookes.
Construction of coupling-joint applicable to pipes, vessels of capacity, and other like uses.	1420	10th June 1853	Samuel Frankham.
Machinery for sawing stone and marble - -	1466	16th June 1853	Richard Archibald Brooman.
Manufacture of waterproof or partly waterproof fabrics.	1483	18th June 1853	Henry Bessemer.
Mode of ornamenting stuffs and paper - -	1492	18th June 1853	William Armand Gilbee.
Preparation for lubricating machinery - -	1508	20th June 1853	Charles Louis Defever.
Application of baths to articles used for resting the human body.	1512	20th June 1853	Joseph Skertchly, junior.
Manufacture of waterproof fabrics - -	1522	22nd June 1853	Frederick Ayckbourn.
Apparatus for measuring liquids, gases, and other elastic fluids, and for regulating the flow thereof; —may also be applied to the obtaining of motive-power.	1525	22nd June 1853	Charles Topham.
Washing wool and hair; treating and preparing before being spun, wool, flax, cotton, and similar fibrous materials.	1539	24th June 1853	Samuel Cunliffe Lister.
Production of printing-surfaces - - -	1546	24th June 1853	Leon Valls.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Constructing and working valves for baths, wash-stands, and other purposes.	1552	27th June 1853	Robert Harlow.
Printing or producing designs and patterns on stuffs and fabrics.	1553	27th June 1853	Richard Archibald Brooman.
Harness for horses and other animals; manufacture of springs for the same.	1576	30th June 1853	Williams Rice.
Drills for agricultural purposes - - -	1581	30th June 1853	William Charles Spooner.
Magneto-electric apparatus suitable for the production of motive power, light, and heat.	1587	1st July 1853	Edward Clarence Shepard.
Apparatus for preventing explosions in steam-boilers - - - - - - -	1588	1st July 1853	John Rollinson. William Rollinson.
Improvements in carriages, scaffoldings, and ladders, which scaffoldings are used as carriages.	1599	4th July 1853	Marcus Davis.
Treatment of certain oils - - - - -	1601	5th July 1853	John Fall.
Improvements in elastic springs - - -	1612	6th July 1853	Peter Gaskell.
Apparatus for curling hair - - -	1616	6th July 1853	John Woodward.
Fire-escape—"The Ignevador" - - -	1618	7th July 1853	Henry Bate.
Apparatus for measuring and indicating the distance travelled by cabs and other vehicles.	1633	8th July 1853	Philippe Poirier de St. Charles.
Improvements in walking-stick umbrellas, applicable also to parasols.	1635	9th July 1853	Thomas Restell.
Apparatus for holding and turning over the leaves of music or music-books.	1645	11th July 1853	George Ager.
Machinery and apparatus for expressing liquid or moisture from substances - - -	1669	14th July 1853	William Needham. James Kite, junior.
Coffins, catacombs, sarcophaguses, and cenotaphs -	1670	14th July 1853	The Honourable Sir Richard Broun, Baronet.
Packing goods so as to increase the facility and safety of their transmission from place to place.	1674	14th July 1853	André Louis Jules le Chevalier St. André.
Spreading or applying india-rubber or compositions of india-rubber on fabrics.	1688	15th July 1853	Charles Goodyear.
Manufacture of brushes and substitutes for bristles	1690	15th July 1853	Charles Goodyear.
Manufacture and refining of sugar - - -	1691	15th July 1853	Henry Bessemer.
Manufacture of pens, pencils, and instruments used when writing, marking, and drawing.	1693	15th July 1853	Charles Goodyear.
Manufacture of beds, seats, and other hollow flexible articles to contain air.	1695	15th July 1853	Charles Goodyear.
Adhesive soles and heels for boots and shoes; apparatus used for preparing and applying the same.	1705	16th July 1853	John Wallace Duncan.
Safety apparatus for the protection and preservation of life on water.	1711	19th July 1853	Donald Brims.
Finishing muslin and other fabrics - -	1721	20th July 1853	Alexander Cochran.
Separating the refuse vegetable matter contained in the stalk and leaves of the plantain species, and also trees grown in tropical climates, from the fibrous material of the same, in order that the latter may be manufactured into ropes or cordage, and for other purposes for which hemp and flax are used.	1723	21st July 1853	John Lilley.
Springs for carriages - - - -	1733	22nd July 1853	George Spencer.
Manufacture of tiles for roofing - - -	1766	27th July 1853	Peter Armand le Comte de Fontainemoreau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Manufacture of boots and shoes	1771	28th July 1853	Thomas Forster.
Mode of producing an electric current	1785	30th July 1853	Peter Armand le Comte de Fontainemoreau.
Machinery for washing wool and hair	1794	1st Aug. 1853	Samuel Cunliffe Lister.
Tap for drawing off liquids	1802	2nd Aug. 1853	William Perks, junior.
Manufacture of a composition resembling papier-mâché and carton-pierre, applicable to the same purposes to which papier-mâché and carton-pierre are applied;—partly applicable to the construction of ships and boats, and roofing.	1804	2nd Aug. 1853	William Henry Clarke.
Apparatus for retarding and stopping trains of carriages on railways.	1807	2nd Aug. 1853	Mead Terry Raymond.
Supplying ships or other vessels with water, air, or ballast.	1808	2nd Aug. 1853	Matthias Edward Boura.
Apparatus used in the manufacture of mould candles	1827	4th Aug. 1853	George Fergusson Wilson Alexander Isaac Austen.
Improvements in horse-shoes	1847	8th Aug. 1853	William Edward Newton.
Desks, work-boxes, dressing-cases, tea-caddies, and similar articles; arrangements and fittings thereof.	1859	10th Aug. 1853	John George Taylor.
Obtaining motive-power	1868	11th Aug. 1853	Thomas Dewsnup.
Affixing postage and other stamps	1872	11th Aug. 1853	Henry Moore Naylor.
Obtaining impressions from dies and other engraved and figured surfaces by stamping or pressure.	1886	12th Aug. 1853	Richard Archibald Brooman.
Combination or combinations of materials suitable for buildings and other structures, and parts thereof; machinery for producing the same.	1888	12th Aug. 1853	William Littell Tizard.
Construction of thermometers and other like indicators.	1890	12th Aug. 1853	William Littell Tizard.
Manufacture of boots and shoes	1905	13th Aug. 1853	Edward John Scott.
Masts and rigging of ships	1914	16th Aug. 1853	Edward Finch. Charles Lamport.
An improvement or improvements applicable to writing slates, pocket and memorandum books, and other such like articles.	1939	18th Aug. 1853	Thomas Hughes.
Raising and lowering various kinds of window-blinds; opening and closing window and other curtains;—applicable also to the raising and lowering, or winding and unwinding, of maps and other sheets or articles, and to the closing of doors.	1944	20th Aug. 1853	James Kimberley.
Machinery, apparatus, or implements for weaving—(*Bands for attaching heald shafts.*)	1948	20th Aug. 1853	William Vaughan. John Scattergood.
Apparatus for generating and applying carbonic acid gas.	1993	27th Aug. 1853	Samuel Taylor.
Production of electricity (*Elbow piece for a conducting tube.*)	2003	29th Aug. 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of waterproof fabrics (*India-rubber cement.*)	2006	30th Aug. 1853	Charles Goodyear.
Rules, graduated scales, and measuring instruments	2008	30th Aug. 1853	Charles Goodyear.
Steam-boilers; apparatus applicable thereto and to be used therewith (*Gauges, valve seats and springs.*)	2029	2nd Sept. 1853	John Tayler. James Griffiths. Thomas Lees.
Manufacture of materials to render them suitable as substitutes for millboard and such like uses. (*Using rollers covered with gutta-percha.*)	2083	9th Sept. 1853	James Childs.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Grinding-mills for farm and other purposes - - (*Washers*)	2106	12th Sept. 1853	Edward Rush Turner.
Mariners' compasses - - - -	2107	12th Sept. 1853	John Lilley, junior.
Manufacture of printing blocks and cylinders - (*Moulds.*)	2110	12th Sept. 1853	Alfred Vincent Newton.
Manufacture of purses, cigar-cases, reticules, bags, tobacco-pouches, and other similar articles.	2146	15th Sept. 1853	Ludwig Frederick Herrman Christoph Knuth.
Manufacture of flexible tubes and bands; covering wire.	2166	17th Sept. 1853	Christopher Nickels.
Improvements in life-preservers - - - (*Chair with india-rubber bags.*)	2180	20th Sept. 1853	Moses Poole.
Treating, stretching, or finishing textile fabrics; machinery or apparatus for effecting the same - (*Clips faced with vulcanized india-rubber.*)	2217	27th Sept. 1853	Isaac Bury. William Green.
System of stoppering vessels and bottles - - (*Washers.*)	2227	28th Sept. 1853	Jean Alexander Labat, junior.
Certain improvements in steam-engines - - (*Valve packings.*)	2232	29th Sept. 1853	James Griffiths.
Apparatus for throwing out ropes or lines for the better preservation of life and property. (*Capsules fitted to the muzzles of cannon.*) (*Communicated by Monsieur d'Houdetot.*)	2237	30th Sept. 1853	John Henry Johnson.
Improvements in weaving - - - - (*Introducing strands of india-rubber.*)	2265	4th Oct. 1853	William Crofts.
Apparatus for fixing capsules on the necks of bottles and other vessels. (*Jaws for receiving the bottle neck.*)	2275	5th Oct. 1853	Henry John Betjemann.
Machinery for thrashing or separating the stem and husk from the grain or seed of wheat, barley, flax and other plants. (*India-rubber bands.*)	2291	7th Oct. 1853	George Ellins.
Trousers and similar articles of dress - - (*Fabric for insertion in the waistband.*)	2294	7th Oct. 1853	James Ferguson. James Lillie.
Apparatus for applying metallic capsules - -	2302	8th Oct. 1853	Alexander Edward Dudley Knox Archer.
Protecting telegraph wires - - - - -	2307	8th Oct. 1853	William Wilkinson.
Bands, belts and straps - - - -	2324	11th Oct. 1853	William Wilkinson.
Manufacture of flexible tubes or pipes - -	2327	11th Oct. 1853	David Dick.
Moulding of bricks and other articles of like materials	2336	11th Oct. 1853	John Francis Porter.
Manufacture of nose-bags - - -	2339	12th Oct. 1853	John Morison. Daniel Hurn.
Galvanic batteries - - - - -	2361	13th Oct. 1853	Charles Ludovic Augustus Meinig.
Building ships and other vessels - - -	2362	13th Oct. 1853	Thomas Grahame.
Improvements in and applicable to looms for weaving.	2375	15th Oct. 1853	Charles Coates.
Construction of railway-carriages - - -	2376	15th Oct. 1853	Frederick Samson Thomas.
Means of cutting, carving, engraving, piercing, or embossing metallic or other surfaces	2382	15th Oct. 1853	Thomas Woodcock.
Letterpress printing-machinery - - -	2396	17th Oct. 1853	Augustus Applegath.
Method of communicating between the guard and driver of a railway-train.	2398	18th Oct. 1853	George Price.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Means of communication between guards, engine-drivers, or passengers in or on railway-trains - (*Tubing.*)	2439	21st Oct. 1853	Henry Cook. Augustus Cook.
An elastic spring contained in a cylindrical tube or tubular case, the lid of which moves up and down according to the pressure.	2443	22nd Oct. 1853	Jean François Mermet.
An appendage to knapsacks - - - (*A pouch.*)	2459	25th Oct. 1853	John Drumgoole Brady.
Manufacture of boots and shoes - - - (*Treads.*)	2466	25th Oct. 1853	Charles Goodyear.
Improvements in galvanic batteries - -	2486	27th Nov. 1853	George Edward Dering.
Mill-banding - - - - - -	2507	31st Oct. 1853	John Turner Wright. Edwin Payton Wright. William Asbury.
Stopping of bottles containing aërated liquids -	2534	2nd Nov. 1853	William Taylor.
Fastening the ends of springs made of india-rubber	2545	2nd Nov. 1853	Richard Edward Hodges.
Construction and arrangement of the buffing apparatus of railway-carriages; mode of applying the buffer and draw springs to such carriages.	2563	4th Nov. 1853	William Racster.
Improvements in life-rafts - - -	2592	8th Nov. 1853	George Frederick Parratt.
Manufacture of fabrics made of silk, cotton-wool, flax, hemp, straw, grasses, fibres, mohair and other hair, spun-glass, and enamelled, glazed, or plain wire; application of some of those materials; machinery or apparatus connected therewith.	2602	10th Nov. 1853	William Pidding.
Preventing accidents on railways; also in shifting and lifting railway-carriages.	2606	10th Nov. 1853	Peter Armand le Comte de Fontainemoreau.
Improvements in saddlery and harness - -	2610	11th Nov. 1853	Edward Gregson Banner.
Means of communication from one part of a railway train to another.	2611	11th Nov. 1853	Henry Walker.
Process of preparing flax or similar fibrous material for rendering it fit for spinning and weaving. (*India rubber bands.*)	2619	11th Nov. 1853	James Hill Dickson.
Manufacture of casks - - - - (*Hoops.*)	2627	12th Nov. 1853	William Austin.
Improvements in surface condensers and in evaporators and heaters for steam-engines.	2682	18th Nov. 1853	Moses Poole.
Mode of communicating from vessels to the shore or from one vessel to another.	2703	21st Nov. 1853	Robert Jamieson Sibbald.
Railway breaks and signals - - - (*Signalling tubes*)	2732	24th Nov. 1853	David Chalmers.
Ornamenting woven fabrics and other surfaces -	2746	25th Nov. 1853	Alexander Drew.
Machinery for making pipes, sheets, still-worms and other articles, from that class of metals called soft metals, as lead, tin, zinc, bismuth or alloys of soft metals that are capable of being forced out of metal-receivers or chambers through dies, cores &c. (*Coating.*)	2784	30th Nov. 1853	Edward Keating Davis.
Certain applications of vulcanized india-rubber - (*For making cloth; also brushes and curry combs*) (*Communicated by Charles Eugene François Guibal.*)	2799	1st Dec. 1853	John Henry Johnson.
Metallic casks and other vessels . - -	2804	2nd Dec. 1853	Alexander Brown.
Apparatus for applying sand to the rails of railways	2853	8th Dec. 1853	James Beall.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA PERCHA, &c.—*continued.*			
Machinery for drilling or boring rocks and other hard substances.	2854	8th Dec. 1853	William Edward Newton.
Instruments and apparatus for indicating or measuring weights and pressures.	2862	9th Dec. 1853	Andrew Shanks.
Improvements in and applicable to looms for weaving.	2878	10th Dec. 1853	Charles Coates.
Improved safety travelling-cap - - -	2888	13th Dec. 1853	William Redgrave.
Manufacture of waterproof fabrics - - -	2890	13th Dec. 1853	James Wansbrough.
Method of producing plans in relievo - -	2894	13th Dec. 1853	André Gaspard Guesdron.
Belts or bands for driving machinery, for use in mines and for other purposes. (*Coating.*)	2936	16th Dec. 1853	Robert William Waithman.
Machinery for operating upon wool, alpaca, mohair, and other fibrous materials, preparatory and prior to being spun. (*Placing strips on porcupine rollers.*)	2937	17th Dec. 1853	Joseph Sharp Bailey
Apparatus used when manufacturing gas;—which apparatus or part of which is also applicable when transmitting gas from one place to another. (*Gutta-percha valve.*)	2939	17th Dec. 1853	George Anderson.
Manufacture of elastic fabrics - - - (*Cemented goods.*)	2940	17th Dec. 1853	Caleb Bedells.
Preventing drafts of air into rooms and places when the doors and windows are shut.	2942	17th Dec. 1853	John Greenwood.
Carts for distributing water or liquid manure - (*Washer.*)	2943	17th Dec. 1853	Isaac James.
Apparatus adapted to the breeding and rearing of fish. (*Fish tray.*)	2966	21st Dec. 1853	Gotlieb Boccius.
Locks of fire-arms - - - - -	2987	24th Dec. 1853	Richard George Coles.
Apparatus for drilling or boring metals and other substances.	2993	24th Dec. 1853	Joseph Lewis.
Governors for regulating the pressure of steam, gas, and other fluids or liquids. (*Valve diaphragm.*)	3002	28th Dec. 1853	John Parkinson.
Manufacture of gaiters - - - - -	3010	28th Dec. 1853	Francis Parker.
Machinery for moulding bricks and other articles of brick earth. (*Gutta-percha straps.*)	3014	29th Dec. 1853	Henry Jackson.
Pistons and stuffing-boxes of engines moved by water, steam, or gas.	3021	29th Dec. 1853	Hypolite Charles Vion.
Machines used for rivetting together metallic plates	3028	30th Dec. 1853	Walter Mabon.
Electric telegraphs and apparatus connected therewith. (*Axle packing.*)	3031	31st Dec. 1853	Henry Vernon Physick.
Portable forges - - - - - - (*Cloth for sides of bellows.*)	3036	31st Dec. 1853	Richard Waygood.
Compositions to be used as substitutes for caoutchouc, gutta-percha, and certain fatty bodies. (*For driving-bands, pipes, waterproofing, &c.*)	3045	31st Dec. 1853	Stanislas Tranquile Modeste Sorel.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HARNESS, SADDLES, REINS, BITS &c.			
Manufacture and treatment of leather either alone or in combination with other materials. (*For making harness.*)	36	6th Jan. 1853	Robert Whinery.
A new regulating-bit	209	28th Jan. 1853	Casimir Noël.
Improvements in bits	368	11th Feb. 1853	Robert Davis Rea.
Fastenings for harness;—also applicable to other like purposes.	430	19th Feb. 1853	James Chadnor White.
Strap or band for connecting together certain parts of harness and saddlery;—applicable also to other purposes where straps or bands are used.	594	9th March 1853	Samuel Blackwell.
Saddlery and harness (*Dumb jockeys, saddle-trees, saddles, reins, curb-biters.*)	595	9th March 1853	Samuel Blackwell.
Girths or pads for retaining saddles in their places	612	10th March 1853	The Honourable William Erskine Cochrane. William Marshall Cochrane.
Improvements in saddlery and harness	860	11th April 1853	John Boydell Gibson.
Apparatus for sustaining bodies in the water (*Making horse-collars buoyant.*)	1013	27th April 1853	John Henry Johnson.
Saddlery and harness	1106	5th May 1853	Matthias Edward Boura.
Combining materials for making a more perfect fabric for harness and for all other similar purposes to which the same may be applied.	1326	30th May 1853	George Wells.
Harness for horses and other animals; manufacture of springs for the same.	1576	30th June 1853	Williams Rice.
An improved bridle	1756	26th July 1853	Alfred Walter Money.
Gig-harness	2236	30th Sept. 1853	James Willis.
Bands, belts, and straps	2324	11th Oct. 1853	William Wilkinson.
Manufacture of nose-bags	2339	12th Oct. 1853	John Morison. Daniel Hurn.
Apparatus for sustaining bodies in the water (*Buoyant dress to be applied to harness.*) (*Communicated by Jacques Lefevre.*)	2429	21st Oct. 1853	John Henry Johnson.
Improvements in saddlery and harness (*Collars, reins, bridles, fastenings*)	2610	11th Nov. 1853	Edward Gregson Banner.
HATCHING, BREEDING, REARING.			
Apparatus for heating buildings, applicable also to horticultural purposes, and to hatching and rearing poultry and game.	1516	21st June 1853	Joseph Newton.
Apparatus adapted to the breeding and rearing of fish.	2966	21st Dec. 1853	Gotlieb Boccius.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HATS, CAPS, AND HAT-COVERS.			
Method of dressing lamb-skin leather and cleaning the wool therefrom - - - - - (*For making hats, caps, and hat-linings.*)	230	29th Jan. 1853	John Ryall Corry. James Barrett Corry.
Manufacture of hats, caps &c.;—applicable to other articles of wearing-apparel.	268	31st Jan. 1853	Thomas Charles Clarkson.
A new application of a system to render waterproof hats, caps, and general hatting; also the application of machines to the manufacturing of general hatting.	293	3rd Feb. 1853	Benoit Dulaurier.
Manufacture of hats for yachting and general purposes.	850	8th April 1853	Patrick Francis Flanagan.
Certain new combinations of gutta-percha with other materials; method of applying such for use. (*Hat bodies, cases, and boxes.*)	906	14th April 1853	John Wallace Duncan.
Manufacture of hat-plush - - - - -	1120	6th May 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of hats - - - - -	1186	13th May 1853	Richard Archibald Brooman.
Manufacture of hair trimmings - - - (*Applicable for manufacturing hats.*)	1275	25th May 1853	William Babb.
Manufacture of hats, caps &c. - - -	1276	25th May 1853	William Babb.
Machinery and apparatus for the manufacture of hats, caps &c.	1322	28th May 1853	Henry Charles Hill.
Hats and other coverings for the head - -	1623	7th July 1853	John Knox Stuart.
Manufacture of hat-bodies of fur and other like substances.	1762	26th July 1853	Lansing E. Hopkins.
Manufacture of hats - - - - -	2659	16th Nov. 1853	Thomas Jackson.
Improved safety travelling-cap - - -	2888	13th Dec. 1853	William Redgrave.
Improvements in hats, caps, and other coverings for the head.	2920	16th Dec. 1853	Walter George Whitehead.
HEATING AND EVAPORATING.			
I.—Heating Manufacturing Vessels; Heating Fluids and Substances.			
Atmospheric engines - - - - - (*Heating compressed air.*)	20	5th Jan. 1853	William Edward Newton.
Heating water in a bath or other vessel - -	27	5th Jan. 1853	Frederick Arnold.
Economizing fuel in the generation and heating of steam.	69	11th Jan. 1853	Joseph Beattie.
Method of heating coal and bituminous substances; treatment of their volatile products.	92	13th Jan. 1853	William Brown.
Production and application of heated air - - (*For heating furnaces.*)	155	21st Jan. 1853	William Taylor.
Treatment or finishing of textile fabrics and materials. (*Heating cylinders.*)	324	5th Feb. 1853	John Campbell.
Obtaining motive-power - - - - - (*Rarefying air.*)	362	10th Feb. 1853	Robert Roger.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Drying and heating certain substances or articles - (*Heating cylinders.*)	434	19th Feb. 1853	Charles Nightingale.
Production of spirit; stills and apparatus employed therein. (*Thermal regulators.*)	468	24th Feb. 1853	Charles Flude.
Heating and making cards - - -	505	28th Feb. 1853	Samuel Cunliffe Lister.
Application of heat for producing evaporation, generating steam, and for general heating purposes &c. - - - -	513	1st March 1853	Charles Flude. James Waterman.
Production of motive-power - - - (*By heating air.*)	516	2nd March 1853	Laurence Hill, junior.
A hydro-dynamic battery or new electro-magnetic apparatus, which with its products is applicable to the production of heat &c.	575	7th March 1853	Augustino Carosio.
Construction of steam-boilers - - - (*Also coppers, caldrons, and vats; obtaining heating surface.*)	626	12th March 1853	Thomas Evans.
Apparatus for heating and annealing metals -	654	16th March 1853	Samuel Colt.
Manufacture of iron - - - - (*Regulating the heat.*)	678	18th March 1853	George Mackay.
Obtaining power when air is employed - - (*Heating expanded air.*)	692	21st March 1853	Moses Poole.
Application of heat for baking - - -	751	29th March 1853	John Gray.
Boots, shoes, and clogs; machinery or apparatus and materials connected therewith. (*Heating the materials and instruments.*)	757	29th March 1853	Julian Bernard.
Apparatus applicable to evaporation and distillation	795	4th April 1853	Joseph Palin.
Drying malt - - - - -	801	4th April 1853	William Walker.
Heating furnaces - - - - -	805	4th April 1853	Francis Steigewald.
Apparatus for the manufacture of gas and coke (*Heating retorts.*)	820	5th April 1853	John Thomas.
Apparatus for heating, applicable for generating steam or evaporating solutions, and may be applied for heating purposes generally.	826	6th April 1853	Henry Alfred Jowett.
An improvement in certain vessels or utensils for heating liquids. (*Kettles or pans.*)	845	8th April 1853	William Ford Smith.
Manufacture or production of charred peat - (*Heating retorts.*)	875	12th April 1853	James Taylor.
Evaporating saccharine fluids - - -	878	12th April 1853	Thomas Greenwood.
Welding cast steel with iron, steel, cast iron, and other metals.	880	12th April 1853	François Félix Verdié.
Treatment of ores and other substances containing metals to obtain products therefrom; apparatus used therein. (*Heating retorts.*)	912	14th April 1853	David Zenner.
Consuming or preventing smoke and heating liquids.	922	16th April 1853	Samuel Bayliss.
Improvements in steam-engines - - - (*Heating the water.*)	963	21st April 1853	James Petrie.
Machinery for combing wool or other fibrous materials.	983	23rd April 1853	William Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Apparatus for regulating the heat and supply of water in hot-water apparatus. (*Heating buildings.*)	1017	27th April 1853	George Critchley.
Improvements in distillation; apparatus connected therewith; also applicable to other purposes in which substances are to be treated by the assistance of a vacuum - - - - - (*Evaporating.*)	1018	27th April 1853	Joseph Palin. Robert William Sievier.
Apparatus for heating - - - - -	1035	28th April 1853	William Armand Gilbee.
Apparatus for vapourizing benzole or other suitable volatile hydro-carbon, and mixing it with atmospheric air, so that the mixture may be burnt for the purposes of illumination or otherwise. (*Heating.*)	1047	29th April 1853	Oliver P. Drake.
Machinery for combing and preparing wool and other fibrous materials.	1137	9th May 1853	John Henry Johnson.
Obtaining motive-power - - - - - (*Super-heating steam.*)	1141	10th May 1853	Frederick Lipscombe.
Economizing fuel by rendering available the heat from coke ovens, and applying the same to the heating of air, kilns, stoves, ovens, and to the generation of steam.	1176	12th May 1853	Joseph Sawtell.
Improvements in steam-boilers - - -	1187	13th May 1853	Edward Taylor Bellhouse.
Machinery or apparatus for evaporating or concentrating liquids.	1278	25th May 1853	George Irlam Higginson.
Generation of steam - - - - - (*Heating steam.*)	1285	25th May 1853	William Edward Newton.
Supplying water to steam-engine boilers - -	1299	26th May 1853	John Box.
Carding wool and other fibrous substances, manufacture of cards for that purpose.	1318	28th May 1853	Daniel Bateman.
Improvements in and applicable to lamps; also applicable to apparatus for lighthouse signal purposes;—partly applicable for other useful purposes.	1327	30th May 1853	John Macdonald.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas and liquids.	1363	3rd June 1853	Ferdinand Louis Gossart.
Construction of steam-boilers or generators; arrangement of furnaces connected therewith. (*Preventing radiation.*)	1528	23d June 1853	James Burrows.
Steam-boilers - - - - - - -	1534	24th June 1853	Joshua Horton, junior.
Certain improvements in railways and locomotives running thereon, which improvements facilitate the ascension of steep inclines. (*Heating steam.*)	1548	25th June 1853	Antoine Andraud.
Magneto-electric apparatus suitable for the production of heat &c.	1587	1st July 1853	Edward Clarence Shepard.
Vessel to be used for the purposes of infusion and decoction, heating liquids, and melting glutinous substances.	1595	4th July 1853	Gabriel Didier Fevre.
Mode of heating madder and munjeet by which the quality of the colouring matter contained in those substances is greatly improved, and its application to dyeing and printing much facilitated.	1627	8th July 1853	William Maddick.
Manufacture or production of cheese - - (*Heating the milk.*)	1728	21st July 1853	Edward Cockey. Henry Cockey. Francis Christopher Cockey.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Steam-engines and boilers for marine purposes -	1775	29th July 1853	James Edward McConnell.
Improved boiler - - - - - -	1829	5th Aug. 1853	William Smith. Thomas Phillips.
Application of heat for baking and drying purposes; generation of steam.	1848	8th Aug. 1853	William Hickson.
Apparatus for preparing the materials employed in the manufacture of certain composition fire-lights - - - - - -	1882	12th Aug. 1853	Edward Lavender. Robert Lavender.
Improvements in evaporating - - -	1895	13th Aug. 1853	Frederick Lipscombe.
Manufacture of oils - - - - -	1897	13th Aug. 1853	John Perkins.
Dyeing or colouring textile fabrics and materials; machinery or apparatus connected therewith. (*Communicated by Emile Weber.*)	1903	13th Aug. 1853	John Henry Johnson.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Steam-engine boilers - - - - -	1960	23rd Aug. 1853	Thomas Charles Medwin.
Kitchen-ranges and cooking-apparatus -	2000	29th Aug. 1853	Joseph Cundy.
Apparatus for heating - - - - -	2002	29th Aug. 1853	Peter Armand le Comte Fontainemoreau.
Improvements in baths - - - - -	2080	9th Sept. 1853	Charles Askew.
Manufacture of zinc - - - - - (*Heating retorts.*)	2120	13th Sept. 1853	Jacob Behrens.
Apparatus and means for communicating matters or heat to currents of air, gases or vapours, or to liquids &c.	2123	13th Sept. 1853	Moses Poole.
Burning certain fluids for the purpose of obtaining heat.	2132	14th Sept. 1853	James Higgin.
Generating steam in steam-boilers - - -	2137	14th Sept. 1853	Jacob Behrens.
Apparatus for heating water or other liquids -	2207	24th Sept. 1853	Charles Maitland. William Gorrie.
Preparation of flax and other vegetable fibrous substances - - - - - - (*Heating water for steeping.*)	2218	27th Sept. 1853	Robert Brisco. Peter Swires Horsman.
Heating reverberatory and other furnaces - -	2255	3rd Oct. 1853	William Joseph Thompson.
Improvements in brewing - - - - (*Heating and boiling worts and hops.*)	2268	4th Oct. 1853	Daniel Towers Shears.
Obtaining certain saline compounds from solutions containing such compounds. (*Evaporating.*)	2269	4th Oct. 1853	William Gossage.
Preparing cotton for spinning; machinery or apparatus for effecting the same. (*Heating the cotton.*)	2279	5th Oct. 1853	John Mason.
Stoves and kitchen-ranges - - - (*Regulating temperature.*)	2287	6th Oct. 1853	Henry Goddard.
Method of dyeing fustians and other textile fabrics; machinery or apparatus connected therewith.	2329	11th Oct. 1853	James Worrall, junior.
Apparatus for heating water and other fluids -	2333	11th Oct. 1853	James Harris.
A system of production of caloric, with or without combustible material.	2420	19th Oct. 1853	André Alexander Beaumont.
Bath for heating and distilling - - -	2535	2nd Nov. 1853	Frederick Albert Gatty.
Obtaining steam-power; regulating the same - (*Super-heating steam.*)	2541	2nd Nov. 1853	Frederick Lipscombe.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Construction of steam-boiler and other furnaces - (*Heating air.*)	2559	4th Nov. 1853	George Nasymth.
Machinery for crushing ores; separating therefrom gold, silver, or other metals contained therein. (*Heating mercury.*)	2564	4th Nov. 1853	William Edward Newton.
Improvements in kneading dough, which said improvements are also applicable to the kneading or beating of clay, loam, or other plastic materials. (*Heating beaters.*)	2566	4th Nov. 1853	Henry Pratt.
Improvements in heating and lighting - -	2620	11th Nov. 1853	Richard Archibald Brooman.
Fixing colours on yarns and cloths - - (*Heating the vessels.*)	2654	16th Nov. 1853	John Ronald.
Furnaces and fireplaces; prevention of smoke - (*Heating the air.*)	2657	16th Nov. 1853	John Ferguson.
Improvements in cooking-stoves - - -	2667	17th Nov. 1853	William Underwood.
Improvements in evaporators and heaters for steam-engines.	2682	18th Nov. 1853	Moses Poole.
Apparatus for heating water and other fluids -	2688	19th Nov. 1853	James Harris.
Application of heat to various useful purposes - (*Heating vessels, vats &c.*)	2731	24th Nov. 1853	James Lovell.
Obtaining motive-power by means of heated gases -	2768	28th Nov. 1853	Prix Charles Jean Baptiste Sochet.
Generating steam and consuming smoke - - (*Heating air.*)	2793	1st Dec. 1853	Thomas Garnett. Daniel Adamson.
Furnaces for the manufacture of steel - - (*Heating steam-boilers with the waste heat.*)	2881	10th Dec. 1853	John Henry Johnson.
Method of evaporating liquids - - -	2897	14th Dec. 1853	John Ambrose Coffey.
Obtaining motive-power - - - - (*Heating cylinders.*)	2912	15th Dec. 1853	Jean Baptiste Pascal.
Presses for expressing oil or other fluids from fruits, grains, or other substances.	2951	19th Dec. 1853	Auguste Edouard Loradoux Bellford.
An improved cooking-apparatus - - -	2954	20th Dec. 1853	Adam Paterson.
Method of obtaining power to raise liquids; treating the said liquids when raised; using them to obtain additional power. (*Boiling liquids in vacuo.*)	2973	22nd Dec. 1853	John Youil.
Manufacture of salt - - - - -	2982	23rd Dec. 1853	John Gillow, junior.
Apparatus for regulating the supply of air to furnaces, and for preventing radiation of heat from fire-doors and other parts of the fronts of furnaces.	3000	27th Dec. 1853	Thomas Symes Prideaux.
Apparatus employed in singeing textile fabrics -	3029	31st Dec. 1853	Isaac Holroyd.
II.—Heating Buildings.			
Production and application of heated air - -	155	21st Jan. 1853	William Taylor.
Improvements applicable to steam-pipes used for warming &c.	437	21st Feb. 1853	Wright Jones.
Construction and arrangements of kitchen-boilers and flues for ranges.	490	26th Feb. 1853	Ebenezer Thornton.
Construction of gas-stoves - - - -	717	24th March 1853	Henry Webster. Edward Dawson Stones.
Warming and ventilating rooms and buildings -	837	7th April 1853	Edward Langdon Bryan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Apparatus for regulating the heat and supply of water in hot-water apparatus.	1017	27th April 1853	George Critchley.
Improvements in hot-air furnaces for heating buildings, some of which improvements are applicable to other furnaces.	1081	3rd May 1853	William Edward Newton.
Apparatus for heating by gas - - -	1130	7th May 1853	William Boggett. George Brooks Pettit.
Improvements in weaving - - - (*Heating the weaving-room.*)	1209	16th May 1853	Robert Boyd.
Heating and ventilating - - - -	1280	25th May 1853	James Lovell.
Heating hothouses, hot-beds, pits, conservatories, houses, churches, and other buildings.	1343	1st June 1853	John Williams Thomson.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids.	1363	3rd June 1853	Ferdinand Louis Gossart.
Apparatus for heating buildings, applicable also to horticultural purposes, and to hatching and rearing poultry and game.	1516	21st June 1853	Joseph Newton.
Apparatus for heating water and other fluids -	2333	11th Oct. 1853	James Harris.
Warming conservatories, greenhouses, and other buildings.	2518	31st Oct. 1853	Richard Restell.
Apparatus for heating water and other fluids -	2688	19th Nov. 1853	James Harris.
HINGES AND PULLEYS.			
A new composition of different metals or metallic substances. (*For moulding pulleys.*)	35	6th Jan. 1853	Edme Augustin Chameroy.
Improvements in hinges - - - -	294	3rd Feb. 1853	George John Newbery.
Depositing metals or alloys of metals - -	1777	29th July 1853	William Edward Newton.
Spring door-hinge - - -	1976	25th Aug. 1853	Alfred Beck Tompson.
Improvements in emigrants' and other portable houses and erections, and hinges of metal for all purposes requiring hinges.	2365	14th Oct. 1853	Samuel Bromhead.
Machinery or apparatus for cutting, boring, and shaping metals and other substances. (*Boring pulleys.*)	2508	31st Oct. 1853	Joseph Haley.
Improvements in forge-hammers - - (*Constructing contact pulleys.*)	2883	10th Dec. 1853	Nicolas Victor Guibert.
HOISTING; CRANES, CAPSTANS, AND SCREW-JACKS.			
Engines to be worked by steam or other fluid - (*Applicable for working cranes.*)	258	31st Jan. 1853	Frederick Lawrence. William Davison. Alfred Lawrence.
Capstans - - - -	510	1st March 1853	William Edward Newton
Obtaining motive-power - - - (*For raising weights.*)	761	30th March 1853	Louis Michel Lombard.
Improvements in screw-jacks - -	1133	7th May 1853	George England.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HOISTING, &c.—*continued.*			
Mode of applying hydraulic power to windlasses for weighing anchors and lifting heavy weights.	1271	23rd May 1853	Henry Turner.
Construction of portable houses; machinery for raising, moving, and lowering the same.	1352	2nd June 1853	William Thorold.
An improved capstan - - - -	1536	24th June 1853	Noble Carr Richardson.
Construction of cranes and other machines for raising heavy bodies.	2015	31st Aug. 1853	Ezra Washington Burrows.
Machinery or apparatus for pressing goods, applicable also to raising or removing heavy bodies.	2390	17th Oct. 1853	John Macmillan Dunlop.
Machinery for raising, moving, and lowering heavy bodies - - - - - - (*Travelling crane.*)	2597	9th Nov. 1853	Thomas Dunn. James Bowman. Joseph Dunn.
Apparatus for lifting and lowering ships and other heavy bodies, either submerged or otherwise.	2649	16th Nov. 1853	Peter Alexander Halkett.
Manufacture of bar and sheet metals; machinery connected therewith, and application of such metals to various useful purposes. (*For cranes.*)	2662	17th Nov. 1853	John Clark, junior.
Machinery applicable for raising and lowering weights of any kind, also for compression and other useful purposes - - - - -	2813	3rd Dec. 1853	Charles Edmund Green. John Bayliss.
Raising and lowering weights - - -	3004	28th Dec. 1853	James Taylor.
HORSE AND WAGGON CLOTHS.			
Covers for waggons, carts, and other vehicles -	990	25th April 1853	John Chatterton.
Production of lace and other fabrics - -	1002	26th April 1853	Auguste le Roy. Jean le Roy. Eugène Pavy.
New description of cloth or fabric applicable to most purposes to which woven and knitted fabrics are applied - - - - - -	1998	27th Aug. 1853	Edward Lacy. William Wilkinson.
HORSE-SHOES.			
Coverings for the feet of quadrupeds, &c. - -	442	21st Feb. 1853	William Pidding.
Improvements in horse-shoes - - -	1847	8th Aug. 1853	William Edward Newton.
Machinery for manufacturing horse-shoes - -	2794	1st Dec. 1853	Auguste Edouard Loradoux Bellford.
An appendage to horse-shoes, to supersede the necessity of roughing them.	2844	8th Dec. 1853	William George Reeve.
HORTICULTURE.			
Method of constructing the walls of hothouses and other buildings.	759	30th March 1853	Martin Billing.
Fastener for flowers and shrubs - - -	1168	11th May 1853	John Lee Stevens.
Pots and vessels for the growth and cultivation of plants.	1340	1st June 1853	Edward Wilkins.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HORTICULTURE—*continued.*			
Application and combination of glass, porcelain, stoneware, earthenware, terra-cotta, composition in plaster called scagliola and majolica ware. (*Horticultural shade.*)	1480	17th June 1853	James Hogg.
Apparatus for heating buildings, applicable also to horticultural purposes, and to hatching and rearing poultry and game.	1516	21st June 1853	Joseph Newton.
Apparatus for heating water or other liquids (*For horticultural purposes.*)	2207	24th Sept. 1853	Charles Maitland. William Gorrie.
HURDLES AND FENCES.			
Machinery for making fences and other similar articles of wire.	390	15th Feb. 1853	Benjamin Greening.
Method of constructing the walls of houses, hothouses, and other buildings;—also applicable to the construction of fences.	759	30th March 1853	Martin Billing.
Machinery or apparatus for manufacturing wire fencing.	2743	25th Nov. 1853	John Berry.
INKSTANDS AND INK.			
Certain improvements in rendering bottles, jars, and other like receptacles air and water tight, and for raising and measuring the liquid contents thereof. (*Applicable to inkstands.*)	62	10th Jan. 1853	Charles Stewart Duncan.
An improved construction of inkstand	108	15th Jan. 1853	Peter Alexander Halkett.
An improved inkstand	213	28th Jan. 1853	Alfred Lucas.
Apparatus for distillation of resin oil, and for an improved method of bleaching and deodorizing the same during the process of manufacture. (*Obtaining printers' ink.*)	483	25th Feb. 1853	Frederick Goodell.
Improvements in inkstands	1367	3rd June 1853	Thomas Barnabas Daft.
Desks, work boxes, dressing-cases, tea-caddies, and similar articles; arrangements and fittings thereof. (*Inkstand covers.*)	1859	10th Aug. 1853	John George Taylor.
Preparation of a black powder from coal; application thereof to the manufacture of paints, blacking, and various other purposes. (*Applicable to printers' ink.*)	1900	13th Aug. 1853	John Gwynne.
Distillation and purification of resin oil (*Making printers' ink from the residue.*)	1920	16th Aug. 1853	Alfred Vincent Newton.
Treatment of lignite or wood-coal; obtaining various useful products therefrom. (*Ivory black for printers' ink.*)	2343	12th Oct. 1853	Edme Jules Maumené.
Improvements in effecting telegraphic communications. (*Inking materials.*)	2885	12th Dec. 1853	Edward Orange Wildman Whitehouse.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
INLAYING.			
Production of ornamental surfaces in glass, porcelain, metals, and similar materials.	828	6th April 1853	William Johnson.
Inlaying or ornamenting earthenware vessels.	1893	12th Aug. 1853	Horatio Wareham.
A certain manner of preparing marquetry and all other kinds of inlaid work in veneers of various thicknesses; fixing the same to walls and ceilings of whatever kind, and in or upon floors of wood, stone, or metal; rendering such floors water and fire proof.	2198	23rd Sept. 1853	Charles Alexander.
IODINE.			
An improved process for the manufacture of iodine -	529	3rd March 1853	James Murdoch.
JAPANNED WARE.			
Ornamenting japanned iron and other hard or bright surfaces with gold.	361	10th Feb. 1853	Charles Breese.
Method of forming designs and patterns upon japanned iron and other surfaces.	1714	19th July 1853	Charles Breese.
JOINING PIPES; COUPLING ROLLS; SCREW-WRENCHES; DOWELS.			
Method of draining dwelling-houses and other buildings, and open and enclosed spaces in cities and towns, where sewers and drains are now or may be hereafter constructed. (*Using valves for joining the pipes.*)	370	12th Feb. 1853	John Fordham Stanford.
Manufacture and application of dowels and machinery connected therewith;—parts of which machinery are applicable to other purposes.	429	18th Feb. 1853	Nathan Dutton.
Machinery for manufacturing and rolling iron - (*Coupling rolls.*)	804	4th April 1853	Charles May.
Propelling vessels and carriages;—parts of the machinery therein employed being also applicable to other like purposes. (*Screw-wrenches.*)	1172	12th May 1853	George Frederic Goble.
Construction of pipe and other junctions - - (*Communicated by Messrs. Laforest and Boudeville.*)	1273	23rd May 1853	John Henry Johnson.
Apparatus for laying pipes in the earth; juncture of such pipes.	1347	1st June 1853	Admiral the Earl of Dundonald.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
JOINING PIPES, &c.—*continued.*			
Construction of coupling-joint applicable to pipes, vessels of capacity, and other like uses.	1420	10th June 1853	Samuel Frankham.
Coupling pipes and other articles; apparatus connected therewith.	2242	1st Oct. 1853	Charles Coates.
Improvements in screw-wrenches	2476	26th Oct. 1853	Patrick Benignus O'Neill.
Joints for tubular drains	2511	31st Oct. 1853	Felix Paulin Rovère.
An improved pipe-wrench	2755	26th Nov. 1853	Joseph Wormald. George Pollard.
Friction-joints or fastenings	3018	29th Dec. 1853	James White.
JUGS, BASINS, AND CUPS.			
Manufacture of knobs for doors and other like uses;—partly applicable to the manufacture of certain articles of earthenware (*Basins, cups &c.*)	320	5th Feb. 1853	John Whitehouse, senior. John Whitehouse, junior.
Jugs or vessels for containing liquids	1537	24th June 1853	George Sands Sidney.
Improvement in or addition to sugar-basins	2893	13th Dec. 1853	André Gaspard Guesdron.
KETTLES AND PANS.			
An improvement in certain vessels or utensils for heating liquids.	845	8th April 1853	William Ford Smith.
Improvements in lathes and parts connected therewith for the purpose of reducing and smoothing the surfaces of certain metal wares. (*Saucepans.*)	859	9th April 1853	William Penn Cresson.
Cleansing of pans and other culinary utensils	905	14th April 1853	Thomas Haigh.
KNAPSACKS AND POUCHES.			
Gunnery and projectiles (with pouch for the latter) adapted for muskets, rifles, pistols, and heavy cannon for field-pieces or forts, batteries, ships of war and other vessels.	591	8th March 1853	John James Alexander Maccarthy.
Improvements in fire-arms (*Waterproof cases for the powder.*)	653	16th March 1853	Henry Richardson Fanshawe.
Improvements in knapsacks	1203	14th May 1853	John Drumgoole Brady.
An appendage to knapsacks (*A pouch.*)	2459	25th Oct. 1853	John Drumgoole Brady.
An improved mode of, or a new arrangement of, straps for slinging knapsacks.	2729	23rd Nov. 1853	John Drumgoole Brady.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
KNIVES, FORKS, RAZORS, AND SHEARS; CLEANING KNIVES.			
Blades of table-knives - - - -	205	27th Jan. 1853	Edward Brown.
Manufacture of forks and other similar articles for domestic use. (*Also butter knives.*)	401	16th Feb. 1853	Job Cutler.
Manufacture of knives and other similar handle instruments.	707	23rd March 1853	Jean Baptiste Massat.
Manufacture of knives and forks - - -	756	29th March 1853	George Shaw.
Metallic handles for table-cutlery, daggers and such like instruments - - - - -	870	12th April 1853	Samuel Russell. Robert Murray M'Turk.
Handles for razors - - - -	1154	12th May 1853	Samuel Russell.
Mode of fastening the handles of table knives and forks - - - - - - -	1395	7th June 1853	Henry George Rowe. Albert George Andrew. William Henry Andrew.
Mode of manufacturing metallic handles for knives and forks, backs for razors, bows for scissors, and the relative parts of such like instruments.	1428	13th June 1853	William Smith.
Mode of fastening the handles of table knives and forks - - - - - - - -	1429	13th June 1853	John Marsh. Theophilus Marsh. James Marsh. Walter Marsh.
Manufacture of handles for knives and other similar articles.	1507	20th June 1853	William Edward Newton.
Improvements in spring or clasp knives, applicable to such other articles as shut or close after the manner of clasp knives.	1535	24th June 1853	Joseph Rock.
Method of making table-knife blades - -	1653	12th July 1853	William Levesley.
Machines for cleaning and polishing knives -	1707	18th July 1853	William Boggett. William Smith.
Manufacture or treatment of gutta-percha; application thereof. (*Communicated by Louis François Alexandre Desille.*)	1904	13th Aug. 1853	John Henry Johnson.
Apparatus for cleaning table-cutlery - -	2145	15th Sept. 1853	Harvey Hilliard.
Improvements in shears - - - -	2178	20th Sept. 1853	John Louis Beloud. Samuel Camile Beloud. George Guyatt.
Polishing and brightening surface - - -	2277	5th Oct. 1853	Samuel Leake Worth. Agmond Dishin Vesey Canavan.
LAMP AND GAS BURNERS, REGULATORS, AND FITTINGS.			
Gas-burners; regulating the combustion of gas -	297	3rd Feb. 1853	John Henry Johnson.
Controlling and regulating the flow or pressure of gas.	549	4th March 1853	Samuel Hazard Huntly.
Illuminating-apparatus; production of light -	570	7th March 1853	Joseph John William Watson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LAMP AND GAS BURNERS, &c.—*continued.*			
Instruments to be applied to the chimneys of gas-burners.	1008	27th April 1853	Benoist Marie Adolphe Langlois.
Improvements in the valves of pressure-lamps and in lamp-burners.	1118	6th May 1853	John Thomas Stroud.
Apparatus for heating by gas - - -	1130	7th May 1853	William Boggett. George Brooks Pettit.
A new or improved stopcock for regulating the flow of gases.	1173	12th May 1853	James Parkes.
Making a gas, steam, air, or liquid safety-tap -	1237	19th May 1853	Samuel Wright.
Apparatus for measuring liquids, gases, and other elastic fluids, and for regulating the flow thereof; —may also be applied to the obtaining of motive-power.	1525	22nd June 1853	Charles Topham.
Apparatus used in the manufacture of gas - -	1621	7th July 1853	Alexander Angus Croll.
Improvements in gas-fittings - - -	1654	12th July 1853	Patrick Cowan.
Improvements in gas-regulators - - -	1716	20th July 1853	Moses Poole.
Mode of regulating the electric light - -	1806	2nd Aug. 1853	Peter Armand le Comte de Fontainemoreau.
Regulating the flow and pressure of gas and other fluids.	1849	8th Aug. 1853	Moses Poole.
An improved manufacture of gas-burner and gas-regulator.	2066	9th Sept. 1853	Alfred Vincent Newton.
Improvements in gas-burners - - -	2556	3rd Nov. 1853	Ebenezer Goddard.
Apparatus used when manufacturing gas;—which apparatus or part of which is also applicable when transmitting gas from one place to another.	2939	17th Dec. 1853	George Anderson.
Governors for regulating the pressure of steam, gas, and other fluids or liquids.	3002	28th Dec. 1853	John Parkinson.
LAMP GLASSES AND SHADES; LAMP AND OTHER REFLECTORS AND LENSES; FRAMES FOR GLASS.			
Signalizing on railways; apparatus used therein - (*Reflectors and bulls-eyes for lamps.*)	117	17th Jan. 1853	Henry Henson Henson. William Frederick Henson.
Reflectors for diffusing light - - -	261	31st Jan. 1853	Marc Louis Adam Farin.
Apparatus for transmitting and reflecting light -	457	23rd Feb. 1853	Edouard Albrecht.
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electrolytic action. (*Reflectors and lenses for electric lamps.*)	634	14th March 1853	William Edwards Staite.
Apparatus for the diffusion of light, to be called the "Myriastratic Reflector."	952	20th April 1853	Emile Chappuis.
Manufacture of porcelain and like wares - - (*Moulding lamp-glasses.*)	1004	26th April 1853	Moses Poole.
Dioptric reflectors - - - - -	1503	20th June 1853	William Boggett. George Brooks Pettit.
Improvements in lamps - - - -	1702	16th July 1853	James Naylor.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LAMP-GLASSES, &c.—*continued.*			
Improvements in lanterns	1719	20th July 1853	John Dent Goodman.
Shade for gas burners and lamps	1839	6th Aug. 1853	John Marten.
Combining glass and other materials	1850	9th Aug. 1853	Thomas Young Hall.
Improvements in safety-lamps;—part or parts of such improvements being applicable to the consumption or prevention of smoke and purposes of ventilation generally.	1851	9th Aug. 1853	Thomas Young Hall.
Improvements applicable to shades or chimneys for lamps, gas and other burners.	1972	24th Aug. 1853	Alfred Augustus de Reginald Hely.
Improvements in lighting, for consuming the carbon escaping combustion in ordinary flames. (*Conical chimneys.*)	2071	9th Sept 1853	Peter Armand le Comte de Fontainemoreau.
Improvements applicable to lanterns, lamps, lamp shades and reflectors, for reflecting concentrating, or diffusing light	2301	7th Oct. 1853	Francis Whitehead. William Whitehead.
Daylight reflectors; apparatus to be used in connection therewith	2458	25th Oct. 1853	John Fordred. Thomas Boyle.
Carriage and other lamps (*Reflectors.*)	2919	16th Dec. 1853	William Binnion.
Manufacture of wrought-iron frames	2959	20th Dec. 1853	James Boydell.
Moderator lamp, or lamps of a similar principle (*Chimneys.*)	2999	27th Dec. 1853	Samuel Sedgwick. Thomas Dawson.
LAMPS AND CANDLESTICKS; LIGHTING.			
Manufacture of ornaments for lamps, chandeliers, and architectural purposes.	10	3rd Jan. 1853	David Hulett.
A new composition of different metals or metallic substances. (*For moulding candelabras.*)	35	6th Jan. 1853	Edme Augustin Chameroy.
Producing electric light	119	18th Jan. 1853	Christoper Binks.
Lamps or lanterns	133	19th Jan. 1853	William Edward Newton.
Ornamenting walls, ceilings, and other surfaces (*Pedestals and chandeliers.*)	144	20th Jan. 1853	William Riddle.
An illuminated night-clock	151	21st Jan. 1853	Abraham Anton Meijsenheijm Knipsehaar.
Safety-lamps, partly applicable to other lamps	166	22nd Jan. 1853	George Fife.
Mode of applying and combining ornamented glass in the manufacture of useful and ornamental articles. (*Pedestals of lamps.*)	265	31st Jan. 1853	John Pinkerton.
Candlesticks	351	10th Feb. 1853	William Joseph Curtis.
Manufacture of chandeliers, gas-brackets, and lamp-frames	440	21st Feb. 1853	Joseph Ramage. Thomas Coffey.
Safety-lamps	458	23rd Feb. 1853	Reuben Plant.
Illuminating apparatus; production of light	570	7th March 1853	Joseph John William Watson.
A hydro-dynamic battery or new electro-magnetic apparatus, which with its products is applicable to the production of light &c.	575	7th March 1853	Augustino Carosio.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LAMPS, &c.—*continued.*			
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electrolytic action. (*Electric lamps.*)	634	14th March 1853	William Edwards Staite.
Construction of oil-lamp - - - - - (*For resin oil.*)	686	19th March 1853	Alfred Vincent Newton.
Applying to illuminating the extract of bituminous products of coal, peat, and lignites; rectifying and depurating the essences and greasy matter from coal.	770	31st March 1853	William Augustus Pascal Aymard.
Manufacture of night-lights and their cases -	775	1st April 1853	George Fergusson Wilson. James Freeman Lee.
Manufacture of night lights and apparatus to be used therewith.	785	1st April 1853	George Fergusson Wilson.
Means for preventing accidents on railways - (*Arranging lights.*)	898	13th April 1853	Moses Robinson.
Preparing oils; apparatus for burning the same -	974	22nd April 1853	Cyprien Marie Tessie du Motay.
Apparatus for vapourizing benzole or other suitable volatile hydro-carbon, and mixing it with atmospheric air, so that the mixture may be burnt for the purposes of illumination or otherwise.	1047	29th April 1853	Oliver P. Drake.
Improvements in and applicable to lamps, also applicable to apparatus for lighthouse signal purposes; —partly applicable for other useful purposes.	1327	30th May 1853	John Macdonald.
Magneto-electric apparatus suitable for the production of light &c.	1587	1st July 1853	Edward Clarence Shepard.
Improvements in lamps - - - - -	1702	16th July 1853	James Naylor.
Improvements in lanterns - - -	1719	20th July 1853	John Dent Goodman.
Depositing metals or alloys of metals - - (*Candelabras.*)	1777	29th July 1853	William Edward Newton.
Mode of producing an electric current - - (*Lighting.*)	1785	30th July 1853	Peter Armand le Comte de Fontainemoreau.
Improvements in safety-lamps;—part or parts of such improvements being applicable to the consumption or prevention of smoke and purposes of ventilation generally.	1851	9th Aug 1853	Thomas Young Hall.
Improvements in lamps - - - - -	1874	11th Aug. 1853	George Dearda.
Lamps and lanterns used therewith - - -	1883	12th Aug. 1853	Read Holliday.
Improvements in lamps - - - - -	1928	17th Aug. 1853	Joseph Hart Mortimer.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug 1853	Auguste Mathieu Maurice de Bergevin.
Construction of submarine lamp - -	1961	23rd Aug. 1853	William Rettie.
A chemical light; apparatus for manufacturing the same.	1990	27th Aug. 1853	Rodolphe Helbronner.
Instantaneous-light apparatus - - - (*For lighting a candle.*)	1999	29th Aug. 1853	Adolph Berend.
Improvements in lighting, for consuming the carbon escaping combustion in ordinary flames.	2071	9th Sept. 1853	Peter Armand le Comte de Fontainemoreau.
Signalling or communicating intelligence - - (*Arranged to light a lamp.*)	2155	16th Sept. 1853	William Carron.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LAMPS, &c.—*continued.*			
Improvements applicable to lanterns, lamps &c.	2301	7th Oct. 1853	Francis Whitehead. William Whitehead.
Construction of globes (*Lighting the interior.*)	2457	25th Oct. 1853	Jean Baptiste Verdon.
Improvements in candlesticks	2549	3rd Nov. 1853	John Moffat.
An improved lamp	2617	11th Nov. 1853	Abel Easton.
Improvements in heating and lighting	2620	11th Nov. 1853	Richard Archibald Brooman.
Railway, ship, and carriage lamps	2906	15th Dec. 1853	Samuel Messenger.
Carriage and other lamps	2919	16th Dec. 1853	William Binnion.
Lighting and extinguishing gas-lamps	2929	16th Dec. 1853	Stephen Norris.
Lamp for signalling	2977	22nd Dec. 1853	Charles Lewis.
Moderator lamp, or lamps of a similar principle	2999	27th Dec. 1853	Samuel Sedgwick. Thomas Dawson.
LANDING-STAGES.			
Apparatus to facilitate the landing and embarking of passengers from steam-boats and other vessels.	2273	5th Oct. 1853	John Wright.
LEATHER, SKINS, AND FURS (*Treating, Tanning, Ornamenting*), MAKING ARTIFICIAL LEATHER AND PARCHMENT.			
Manufacturing and treating caoutchouc (*Printing to imitate leather.*)	22	5th Jan. 1853	Gustave Eugène Michel Gerard.
Manufacture and treatment of leather either alone or in combination with other materials.	36	6th Jan. 1853	Robert Whinery.
Manufacture of artificial leather	83	27th Jan. 1853	George Augustus Huddart.
Method of dressing lamb-skin leather and cleaning the wool therefrom	230	29th Jan. 1853	John Ryall Corry. James Barrett Corry.
Improvements in tanning (*Communicated by Herman de Boc.*)	914	14th April 1853	François Marie Antoine Serruys.
Machinery or apparatus for marking, ruling, or ornamenting surfaces. (*Leather.*)	1015	27th April 1853	William Johnson.
Manufacture of losh or oil-dressed leather	1127	7th May 1853	John Pullman.
Treating animal matters for softening and otherwise improving the quality of the same. (*Furs and skins.*)	1198	14th May 1853	Francis Montgomery Jennings.
Preparing and tanning of skins, hides, or pelts of animals.	1200	14th May 1853	Stephen Garrett.
Plastic compound applicable to various ornamental and useful purposes. (*Substitute for parchment and leather.*)	1260	21st May 1853	Henri Joseph Scoutetten.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LEATHER, &c.—*continued.*			
Manufacture of parchment - - -	1354	2nd June 1853	William Hammond Smith.
Manufacture of boots and shoes - - - (*Japanning the leather.*)	1771	28th July 1853	Thomas Forster.
Machinery for printing leather and other similar fabrics or materials.	1936	18th Aug. 1853	William Curtain.
Treatment or preparation of skins - - - (*Tawing.*)	2240	30th Sept. 1853	John Taylor.
Manufacture of artificial skins - - -	2684	18th Nov. 1853	John Harcourt Brown.
Treating or preparing paper - - - -	2834	6th Dec. 1853	William Edward Gaine.
Improvements in tanning - - - - (*Also tanning liquor.*)	2930	20th Dec. 1853	Emile Victor Felix Lemaire.
Manufacture of imitation leather - - -	2968	21st Dec. 1853	Heiman Kohnstamm.
Compositions to be employed as substitutes for caoutchouc, gutta-percha, and certain fatty bodies. (*For dressing leather.*)	3045	31st Dec. 1853	Stanislas Tranquile Modeste Sorel.
LETTERS, INSCRIPTIONS, NAME-PLATES, &c.			
Application of porcelain and similar materials to ornamenting purposes. (*Show-stands for shop-windows.*)	637	14th March 1853	John Henry Johnson.
Producing plates or surfaces which may be used as door or number plates, or other surfaces bearing inscriptions or devices of various kinds.	796	4th April 1853	William Edward Newton.
Method of manufacturing letters and figures to be used as lettering for sign and window boards and other such like purposes.	810	5th April 1853	William Mavity.
Combining glass and other materials - -	1850	9th Aug. 1853	Thomas Young Hall.
Certain tablets, labels and signs, or their surfaces; exhibiting letters and designs.	2913	15th Dec. 1853	Frederick William Branston.
LIGHTHOUSES.			
Mode of constructing certain works applicable to lighthouses, submarine foundations, and other useful purposes.	247	31st Jan. 1853	Samuel Perkes.
Apparatus for producing and applying current electricity; — partly applicable for obtaining and treating certain chemical products resulting from electrolytic action. (*For electric lighthouses.*)	634	14th March 1853	William Edwards Staite.
Improvements in and applicable to lamps, also applicable to apparatus for lighthouse signal purposes; —partly applicable for other useful purposes.	1327	30th May 1853	John Macdonald.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LIGHTING FIRES.			
Apparatus for lighting fires	402	16th Feb. 1853	Benjamin Cook.
Manufacture of fire-lighters; machinery connected therewith.	1255	21st May 1853	George Carter.
Manufacture of fire-lighters	1261	21st May 1853	George Marriott.
LOCKS, BOLTS, KEYS, AND FINGER-PLATES.			
Construction of knobs, handles, and other articles of glass, earthenware, and other vitreous and semi-vitreous substances; attaching the same to doors, drawers, and other articles.	149	21st Jan. 1853	Eliezer Edwards.
Locks and latches	160	21st Jan. 1853	John Chubb. John Goater.
An improved lock or system of locks	229	29th Jan. 1853	Francis Whishaw.
An improved construction of lock	238	29th Jan. 1853	Lewis Jennings.
Improvements in locks	367	11th Feb. 1853	William Choppin.
Door or finger-plate	524	2nd March 1853	Alfred Augustus de Reginald Hely.
Construction and manufacture of door-bolts	953	20th April 1853	Henry M'Evoy.
Improvements in locks	1074	3rd May 1853	George Frederic Goble.
Improvements in locks	1266	23rd May 1853	William Simson.
Locks and keys;—partly applicable to window-sashes and doors.	1310	27th May 1853	William Henry Bentley.
Improvements in locks	1600	4th July 1853	Decimus Julius Tripe.
Locks and latches	1617	6th July 1853	William Edward Newton.
Depositing metals or alloys of metals	1777	29th July 1853	William Edward Newton.
Improved lock	1866	11th Aug. 1853	John Rushbury.
Locks and keys	1932	18th Aug. 1853	Alexis Pige.
Construction of locks	2076	9th Sept. 1853	Michael Leopold Parnell.
Improvements in locks	2077	9th Sept. 1853	James Martin.
Shaping metals (*Bolt-cases.*)	2229	29th Sept. 1853	John Phillips.
Means for preventing the fraudulent abstraction of property. (*Lock for safes &c.*)	2567	7th Nov. 1853	Alfred Vincent Newton.
Roses of door and other locks	2593	8th Nov. 1853	Edward Lambert Hayward.
Improvements in locks	2698	21st Nov. 1853	Walter Henry Tucker. William Rashleigh Reeves.
Construction of locks and keys	2879	10th Dec. 1853	Hippolyte Laurent du Bost.
Lock and latch spindles	2907	15th Dec. 1853	Thomas Pugh. William Kennard.
Locks and latches	2990	22nd Dec. 1853	James Gibbons, junior.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LOOKING-GLASSES AND FRAMES; PICTURE-RODS.			
Manufacture of ornaments for lamps, chandeliers, and architectural purposes. (*Entablatures and frames for mirrors, pictures &c.*)	10	3rd Jan. 1853	David Hulett.
Ornamenting walls, ceilings, and other surfaces - (*Frames.*)	144	20th Jan. 1853	William Riddle.
Method of constructing picture rods and other rods from which articles are suspended.	579	8th March 1853	Thomas James Perry.
Construction of looking-glasses; apparatus connected therewith.	648	15th March 1853	Ephraim Sabel.
Application and combination of glass, porcelain, stoneware, earthenware, terra-cotta, composition in plaster called scagliola and majolica ware.	1480	17th June 1853	James Hogg.
Compounds which may be employed for mouldings, frames, and many purposes to which wood, papier-mâché, plaster, gutta-percha, and other like substances are applicable.	1885	12th Aug. 1853	Richard Archibald Brooman.
Daylight reflectors; apparatus to be used in connection therewith - - - - - (*Silvering glass.*)	2458	25th Oct. 1853	John Fordred. Thomas Boyle.
Friction-joints or fastenings - - - (*For toilet and cheval glasses.*)	3018	29th Dec. 1853	James White.
MANGLES; IRONING AND MANGLING.			
Manufacture of batting or wadding - - (*Ironing.*)	114	17th Jan. 1853	Auguste Edouard Loradoux Bellford.
An improved mangle - - - -	132	19th Jan. 1853	William Francis Snowden.
Manufacture of mangles - - - -	1174	12th May 1853	Martin Walter O'Byrne. John Dowling.
An improved mangle - - - -	1659	12th July 1853	William Francis Snowden.
Finishing muslin and other fabrics - - -	1721	20th July 1853	Alexander Cochran.
An improved mangle - - - -	1789	23rd July 1853	John Hall.
Obtaining motive-power - - - - (*For turning mangles.*)	1868	11th Aug. 1853	Thomas Dewsnup.
A new or improved instrument for ironing clothes or various other articles. (*Communicated by Jeremiah W. Brown.*)	2605	10th Nov. 1853	Samuel Mead Folsom.
Weaving and manufacturing raised-pile fabrics; machinery employed therein. (*Ironing.*)	2707	22nd Nov. 1853	Edward Briggs.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MANURE.			
Treating sewage waters and other matters - -	29	5th Jan. 1853	William Bardwell.
Manufacture of manure - - - - -	123	18th Jan. 1853	Orlando Reeves.
Treating animal matters; manufacturing manure -	349	9th Feb. 1853	John Webster.
Manures - - - - - -	546	4th March 1853	George Elliot.
Deodorizing sewage water and cesspools; manufacturing manures.	581	8th March 1853	Jacques Francisque Pinel.
Manufacture of manure - - -	629	12th March 1853	Thomas Rhodes.
Treating sewage and manufacturing manure therefrom.	643	15th March 1853	Thornton John Herapath.
Manufacture of manure - - - -	682	19th March 1853	Henry Bousquet.
Preserving or preventing decomposition in vegetable and animal substances and matters. (*Deodorizing fecal matters for manures.*)	740	28th March 1853	George Edward Dering.
Manufacture of certain compounds containing phosphoric acid.	1208	16th May 1853	Thomas Richardson.
Manufacture of manure - - -	1230	18th May 1853	Edward Thornhill Simpson.
Disinfecting sewage or other fetid matters; absorbing noxious gaseous exhalations.	1252	20th May 1853	Thomas Isaac Dimsdale.
Purification of coal-gas for the purposes of illuminating and heating; obtaining by the ingredients used therefor, manures &c.	1258	21st May 1853	William Chisholm.
Production or manufacture of artificial manures -	1375	4th June 1853	John Chisholm.
Manufacture of artificial manure - - -	1505	20th June 1853	John William Perkins.
Disinfecting sewers and other drains; converting the contents thereof to useful purposes.	1511	20th June 1853	Allan Macpherson.
Machinery and apparatus for expressing liquid or moisture from substances - - - (*Drying sewerage.*)	1669	14th July 1853	William Needham. James Kite.
Generating and fixing ammonia - - -	1750	25th July 1853	Charles Frederick Spieker.
Manufacture of manure - - - -	1876	11th Aug. 1853	William Longmaid.
Manufacturing compost or manure - -	1968	24th Aug. 1853	George Culverhouse.
Manufacture of artificial manure - - -	1978	25th Aug. 1853	John Shaw. Joseph Steinthal.
Manufacture of manure - - - -	2027	1st Sept. 1853	Robert Oxland.
An improved manure - - - -	2088	10th Sept. 1853	William Charlton Forster.
Utilizing the saponaceous matters contained in the waste waters of woollen and other manufactories	2519	31st Oct. 1853	Celestin Pechoin. Eugène Pechoin Barades.
Process of preparing flax or similar fibrous material, and rendering it fit for spinning and weaving. (*And using the waste liquor as manure.*)	2619	11th Nov. 1853	James Hill Dickson.
Treatment of sewerage and other polluted liquids and the products thereof.	2780	29th Nov. 1853	James Alexander Manning.
Distillation of organic substances; obtaining products therefrom.	2868	9th Dec. 1853	John Chisholm.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MANURE—*continued.*			
Disinfecting sewers or other drains or depositories of fetid matters or gases; converting the contents thereof to useful purposes, (*Making and disinfecting manure*)	2876	10th Dec. 1853	Allan Macpherson.
Manufacture of liquid hydro-carbons and paraffine - (*Using ammoniacal water and residue as manure.*)	2958	20th Dec. 1853	Paul Wagenmann.
MAPS AND GLOBES; ROLLING MAPS.			
Maps, charts, and other articles wound on rollers -	101	14th Jan. 1853	William Steads.
Rollers, rods or poles, for maps and such like purposes. - - - - -	576	7th March 1853	Thomas Turner Chatwin. Robert M^{c}Leish.
Rollers or mountings for maps and other like articles.	919	15th April 1853	John Lewthwaite.
Manufacture of geographic and other maps -	1066	2nd May 1853	Ambroise Maurice Christophe Claude Faure.
Construction of celestial and terrestrial globes -	1093	4th May 1853	Jean Baptiste Verdun. Jean Baptiste Mertens.
Construction of globes - - - - -	2457	25th Oct. 1853	Jean Baptiste Verdun.
Method of producing plans in relievo - -	2894	13th Dec. 1853	André Gaspard Guesdron.
MEASURING CLOTH; MEASURING FOR APPAREL; INDICATING LENGTH OF YARN; RULES AND SCALES; MEASURING CORN.			
Improvements applicable to machinery or apparatus for reeling or winding silk, cotton, or other fibrous substances, for measuring or gauging the same.	116	17th Jan. 1853	Adolphe Iglesia.
Apparatus for measuring the human figure and transferring the said measurement to cloth.	264	31st Jan. 1853	Charles Cattanach.
Machinery or apparatus for measuring or indicating the length of yarn as it is spun or wound on bobbins or rollers.	318	5th Feb. 1853	George Hewitson.
Construction and manufacture of measuring-rules -	632	14th March 1853	William Quinton. Benjamin Quinton. John Quinton.
Apparatus for measuring corn, pulse, seeds, or other produce usually sold by dry measure.	1558	28th June 1853	John Jarman.
Rules, graduated scales, and measuring instruments.	2008	30th Aug. 1853	Charles Goodyear.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MEASURING CLOTH, &c.—*continued.*			
Machinery for measuring and winding or rolling fabrics.	2774	28th Nov. 1853	Samuel Hurrell.
Apparatus for measuring and fitting garments of persons.	3043	31st Dec. 1853	Pierre Sonntag.
MEASURING THE SPEED OF VEHICLES, SHIPS, AND CURRENTS; MEASURING DISTANCES; COUNTING NUMBERS.			
Indicating and registering the number of passengers conveyed in public carriages.	76	12th Jan. 1853	John Horrocks.
Ascertaining and registering the number of persons entering or quitting omnibuses or other vehicles or vessels, applicable in whole or in part to buildings or other places.	103	15th Jan. 1853	James Stewart Kincaid.
Apparatus for indicating the number of passengers entering in or upon omnibuses, and also their exit therefrom.	439	21st Feb. 1853	John O'Leary.
Machinery or apparatus applicable to wheels or axles for counting and indicating the number of rotations made thereby.	489	26th Feb. 1853	William Edward Newton.
Measuring the steerage-way of vessels and the rapidity of currents of water and air;—applicable to ventilating ships and railway-carriages. (*Communicated by Messrs. Overdwyn and Droinet.*)	606	9th March 1853	Frederick William Campin.
Method of measuring and registering the distance run by ships and boats proceeding through the water;—applicable to measuring and registering tides and currents.	1388	6th June 1853	John Walter Friend.
Improved instrument for measuring and tracing - (*In surveying.*)	1464	16th June 1853	Jules Alexis Adrien Dumoulin.
Logs for indicating the speed of ships and other vessels.	1620	7th July 1853	Auguste Edouard Loradoux Bellford.
Apparatus for measuring and indicating the distance travelled by cabs and other vehicles.	1633	8th July 1853	Philippe Poirier de St. Charles.
Manufacture of tablets and dial-plates applicable to showing the distances of carriages travelling &c.	1788	1st Aug. 1853	John Smeeton.
Apparatus for measuring distances travelled over by vehicles.	1805	2nd Aug. 1853	Antoine Joseph Quinche.
Apparatus or machine for ascertaining the distance traversed by cabs and other vehicles.	1830	5th Aug. 1853	Richard Peters.
Apparatus for ascertaining or registering the number of persons travelling by omnibuses or other vehicles, or who may have entered in or passed by, out of, or through any particular place, vehicles, or building, during any given period -	1867	11th Aug. 1853	Joseph Bacon Finnemore. Edwin Daniel Chattaway.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MEASURING, &c.—*continued.*			
Apparatus for measuring the distance travelled by vehicles.	2160	16th Sept. 1853	John Adcock.
Instruments or apparatus for measuring and indicating the distance travelled by carriages; means of transmitting motion thereto from the running wheels.	2270	4th Oct. 1853	James Lee Norton.
Apparatus for measuring and indicating the distance travelled by a carriage.	2395	17th Oct. 1853	John Palmer de la Fons.
MEDICAL AND SURGICAL APPARATUS AND APPLIANCES.			
Apparatus for facilitating the examination of various internal parts of the human frame.	353	10th Feb. 1853	William Edward Newton.
Beds or couches for sick persons - - -	794	4th April 1853	James Findlow.
Certain instruments, apparatus, and articles for the application of electro-galvanic and magnetic action for medical purposes.	806	4th April 1853	Antoine Burq.
Construction of easy-chairs - - - (*Or tables.*)	909	14th April 1853	Robert Wyburn.
Improvements in inhaling-tubes - -	955	20th April 1853	Richard Archibald Brooman.
Method of feeding infants and invalids; apparatus connected therewith.	987	25th April 1853	Edward O'Connell.
Construction of apparatus to be used as a chest-expander &c.	1398	7th June 1853	Alfred Vincent Newton.
Improvements in respirators - - -	1419	10th June 1853	Josiah Moore.
Mode of manufacturing metallic handles for knives and forks, backs for razors, bows for scissors, and the relative parts of such like instruments.	1428	13th June 1853	William Smith.
Means of carrying, bedding, and bathing the injured, ill, or invalid persons.	1826	4th Aug. 1853	Barthelemy Louis François Xavier Fléchelle.
Vessels for preserving leeches alive - -	2303	8th Oct. 1853	George Lifford Smartt.
Instruments for taking and applying vaccine matter	2686	18th Nov. 1853	James Rice. William Matthews.
Improvements in hats, caps, bonnets, and other coverings for the head. (*Introducing galvanic currents for curing headache.*)	2920	16th Dec. 1853	Walter George Whitehead.
MEDICINES.			
Deodorising cod-liver oil; rendering it more agreeable and easier to use, either by itself or mixed, so as to be capable of being administered in larger quantities and with greater success.	365	11th Feb. 1853	Sir James Murray, Knt.
Preparations from sulphate of iron to be employed as medicines.	1219	18th May 1853	George Underwood.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MEDICINES—*continued.*			
Mode of making with iodine and its compounds, in combination with substances containing extractive principles, various elementary combinations. (*Salts and powders of cinchona, &c.*)	1497	18th June 1853	Jacques François Dupont de Bussac.
Machinery or apparatus for grinding or levigating various substances. (*Pestle.*)	1545	24th June 1853	Henry Goodall.
Manufacture of sulphate of quinine - - -	1768	28th July 1853	Edward Herring.
Medicine for the cure of venereal affections—"Treisemar."	2263	4th Oct. 1853	Henry Jacob Jordan.
A certain chemical compound or compounds applicable as a remedy for cuts, scalds, burns, wounds, and accidents of a similar nature to which the same can or may be applied.	2364	14th Oct. 1853	William Jones.
Manufacture of quinine and other alkaloids - -	2646	15th Nov. 1853	John Hall Brock Thwaites. William Bird Herapath, M.D.
Certain chemical compound or compounds applicable as a remedy or remedies for scorbutic and other affections of the human body.	2819	5th Dec. 1853	Charles William Hockaday.
MEDICINES FOR ANIMALS.			
Preparing lotions—"The synovitic lotions"	504	23th Feb. 1853	Joseph Major.
An invention for the cure of the roup and other diseases in fowls and poultry.	2442	22nd Oct. 1853	John Baily.
Composition for curing diseases in the feet of animals.	2689	19th Nov. 1853	Auguste Castets.
METALLIC SALTS AND OXYDES.			
Furnaces and apparatus combined therewith for collecting and condensing the oxydes or other substances evaporated in the process of deoxydizing iron or other ores.	283	2nd Feb. 1853	Auguste Edouard Loradoux Bellford.
Manufacture of oxyde of zinc or zinc white; apparatus for that purpose.	433	19th Feb. 1853	Charles Cowper.
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electrolytic action. (*Obtaining metallic oxydes.*)	634	14th March 1853	William Edwards Staite.
Manufacture of certain salts and oxydes of metals -	741	28th March 1853	George Edward Dering.
Treatment of ores and other substances containing metals to obtain products therefrom; apparatus used therein. (*Salts of iron.*)	912	14th April 1853	David Zenner.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALLIC SALTS, &c.—*continued.*			
Manufacture and purification of gas for illumination, and certain products therefrom; apparatus for that purpose. (*Cyanides of potassium and sodium.*)	924	16th April 1853	Jean Marie Souchon.
Manufacture of white oxyde of zinc - - -	998	26th April 1853	George Kennedy Geyelin.
Manufacturing chlorine; obtaining certain salts and other useful products from the residual matters of such manufacture.	1319	28th May 1853	Christopher Binks.
Production of chlorine; manufacture of black oxyde of manganese.	1470	16th June 1853	Robert Mortimer Glover.
Mode of making with iodine and its compounds, in combination with substances containing extractive principles, various elementary combinations. (*Iodhydrates.*)	1487	18th June 1853	Jacques François Dupont de Bussac.
Construction of furnaces for the purpose of obtaining products from ores.	1672	14th July 1853	William Henderson.
Obtaining iodide of potassium when heating certain metals.	1759	26th July 1853	Farnham Maxwell Lyte.
Manufacture of fuel; its preparation and applications for the reduction of ores, fusing and refining metals, cementation or making steel, and treating salts - - - - - - -	2817	3rd Dec. 1853	John Gwynne. James Egleson Anderson Gwynne.
METALS.			
I.—Ore and Quartz Crushing, Washing, Separating, Amalgamating, Sifting, Smelting.			
Machinery for separating gold or other valuable substances from other materials.	37	6th Jan. 1853	Michael Smith.
Separating substances of different specific gravities.	68	10th Jan. 1853	Alfred Vincent Newton.
Steam-machinery used for crushing &c. - -	102	14th Jan. 1853	Frederick Joseph Bramwell. Isham Baggs.
Manufacture of iron - - - - (*Smelting.*)	218	28th Jan. 1853	Thomas Symes Prideaux.
Apparatus for separating gold from matter mixed or combined therewith.	233	29th Jan. 1853	Marcus Spring.
Furnaces and apparatus combined therewith for making wrought iron directly from the ore, and for collecting and condensing the oxydes or other substances evaporated in the process of deoxydizing iron or other ores.	283	2nd Feb. 1853	Auguste Edouard Loradoux Bellford.
Separation of certain metals from their ores or other compounds.	326	5th Feb. 1853	Alexander Parkes.
Mode of smelting iron and other ores; manufacture of lime.	332	7th Feb. 1853	John Londe Tabberner.
Operating upon auriferous quartz, clays, and other minerals, preparatory to and in order to accomplish the separation of the gold and other metals; machinery or apparatus for the purpose.	374	12th Feb. 1853	George Henry Bursill.
Obtaining copper and zinc from their ores - -	388	15th Feb. 1853	John Bethell.
Cleansing and separating ores and coal - -	582	8th March 1853	Nicolas Schmitt.
Obtaining tin from ores - - - -	587	8th March 1853	Frederick William Emerson.

Subject-matt r of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Smelting or reducing iron ore, ironstone, or slag or scoria. (*Crushing and mixing ore.*)	683	19th March 1853	George Dalton.
Mode of smelting iron and other ores - -	700	22nd March 1853	John Henry Johnson.
Manufacture of iron - - - - (*Balling.*)	825	6th April 1853	Henry Leachman.
Treatment of ores and other substances containing metals, to obtain products therefrom; apparatus used therein. (*Smelting and precipitating.*)	912	14th April 1853	David Zenner.
Separating certain metals from their ores and alloys and obtaining certain products therefrom.	984	23rd April 1853	James Napier.
Machinery or apparatus for washing earths containing gold extracted from the bottom of rivers or other waters - - - - - -	997	26th April 1853	Jacques Emile Joffriaud. Rodolphe Riviere.
Machinery for crushing or otherwise treating ores and other similar materials.	1060	2nd May 1853	James Reeves.
Treating certain ores and minerals for the purpose of obtaining products therefrom.	1078	3rd May 1853	Louis Cornides.
Machinery for crushing auriferous quartz and amalgamating the gold therefrom. (*Communicated by Mr. H. Berdan.*)	1105	5th May 1853	Jean Conrad Stiffel.
Machinery for washnig ores and separating metals from earth or other compounds.	1161	11th May 1853	John Mottram.
Manufacture of iron - - - -	1223	18th May 1853	Bernard Peard Walker. James Warren.
An improved forge-hammer - - - (*Ore-stamper.*) (*Communicated by Jean Schmerber.*)	1272	23rd May 1853	John Henry Johnson.
Manufacture of iron - - - - (*Smelting.*)	1293	26th May 1853	Charles Cowper.
Mode of obtaining auriferous deposits from the beds of rivers and lakes, and from pits containing water - - - - -	1402	7th June 1853	Frederick Ludewig Hahn Danchell. William Startin.
Machinery for pulverizing and washing quartz or ore; amlgamating the gold contained therein.	1476	17th June 1853	Auguste Edouard Loradoux Bellford.
Machinery or apparatuses for reducing and pulverizing gold and other metalliferous quartz and earths; separating metal therefrom.	1590	2nd July 1853	Lemuel Wellman Wright.
Quartz crushing, pulverizing, and amalgamating machine.	1605	5th July 1853	Moses Poole.
Treating certain ores and minerals for the purpose of obtaining products therefrom.	1625	8th July 1853	Louis Cornides.
Manufacture of iron - - - -	1665	13th July 1853	John Londe Tabberner.
Crushing and washing ores and earths - -	1717	20th July 1853	Edwin Dalton Smith.
Machinery for crushing, grinding, and pulverizing stone, quartz, or other substances.	1945	20th Aug. 1853	John Webster Cochran.
Crushing and pulverising quartz and other substances. (*Communicated by T. Briggs Smith.*)	1958	23rd Aug. 1853	Moses Poole.
Apparatus for separating gold or silver from their ores or other matters by amalgamation.	2090	10th Sept. 1853	John Dickinson Brunton.
Machinery for crushing and grinding mineral and other substances.	2113	12th Sept. 1853	Alfred Vincent Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Manufacture of zinc - - - - -	2120	13th Sept. 1853	Jacob Behrens.
Machine for collecting, preserving, and thereby preventing loss of mercury in the process of amalgamating metals, and for the more perfect and economical washing, separating, and amalgamating of auriferous and other ores.	2234	29th Sept. 1853	Hiram Berdan.
Machinery for breaking stones and other hard substances.	2357	13th Oct. 1853	Sir John Scott Lillie.
Manufacture of iron - - - - -	2378	15th Oct. 1853	John Henry Johnson.
Manufacture and refining of copper - - -	2392	17th Oct. 1853	Capper Pass.
Reduction of silver ores by mixture with other materials. (*Fluxing.*)	2474	26th Oct. 1853	William Penrose.
Machinery for crushing ores; separating therefrom gold, silver, or other metals contained therein.	2564	4th Nov. 1853	William Edward Newton.
Obtaining gold and silver from ores, alloys, or compounds containing such metals - - (*Smelting.*)	2645	15th Nov. 1853	John Cameron. James Napier.
Manufacture of fuel; its preparation and applications for the reduction of ores, fusing and refining metals, cementation or making steel, and treating salts - - - - - -	2817	3rd Dec. 1853	John Gwynne. James Egleson Anderson Gwynne.
Separating silver from its ores or other compounds (*Smelting.*)	2931	16th Dec. 1853	Alexander Parkes.
Crushing and grinding quartz, minerals, and other matters.	2932	16th Dec. 1853	Robert Burt Hall.
Machinery for crushing, washing, and amalgamating gold and other ores and substances.	2965	20th Dec. 1853	R. B. Huygens.
Machinery for grinding auriferous and other ores, and separating the metal therefrom.	3033	31st Dec. 1853	John Pym.
Grinding, amalgamating, and washing quartz and other matters containing gold - -	3035	31st Dec. 1853	Alfred Trueman. Isham Baggs.
See also "FURNACES."			
XI.—Casting.			
Construction of centrifugal pumps - - - (*Casting.*)	14	3rd Jan. 1853	Charles Edwards Amos.
Projectile - - - - - - - (*Casting balls.*)	86	12th Jan. 1853	Edward Haslewood.
Manufacture of tubes; application of tubes to certain purposes - - - - -	110	17th Jan. 1853	Thomas Potts. James Septimus Cockings.
Manufacture of hoops and tires for railway wheels and other purposes.	138	20th Jan. 1853	Peter Rothwell Jackson.
Blades of table-knives - - - - -	205	27th Jan. 1853	Edward Brown.
Manufacture of spoons and forks and other similar articles for domestic use.	401	16th Feb. 1853	Job Cutler.
Manufacture of chandeliers, gas-brackets, and lamp-frames - - - - - -	440	21st Feb. 1853	Joseph Ramage. Thomas Coffey.
Manufacture of certain parts of machinery to be used in preparing and spinning cotton and other fibrous materials.	473	25th Feb. 1853	Francis Preston.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Apparatus called "pressers" employed in the preparation of cotton and other fibrous materials for spinning. (*Casting flyers.*)	551	4th March 1853	George William Bott.
Manufacture of tubes and mandrils	718	24th March 1853	William Keates.
Manufacture of knives and forks (*Bolsters and handles.*)	756	29th March 1853	George Shaw.
Machinery for manufacturing and rolling iron (*Casting rolls.*)	804	4th April 1853	Charles May.
Metallic handles for table-cutlery, daggers, and such like instruments	870	12th April 1853	Samuel Russell. Robert Murray M'Turk.
Construction and manufacture of door-bolts	953	20th April 1853	Henry M'Evoy.
Construction of railways (*Rails and points.*)	962	21st April 1853	Henry Carr.
Casting metals and moulding or forming other materials.	995	25th April 1853	Julian Bernard.
Constructing and applying models or patterns for moulding preparatory to casting iron, brass, and other metals for various purposes	1010	27th April 1853	John Hetherington. John Dugdale. Edward Dugdale.
Manufacture of cases for jewellery, for optical and other instruments, miniatures, and other articles.	1075	3rd May 1853	Richard Quin.
Moulding or shaping metals	1136	9th May 1853	David Law. John Inglis.
Manufacture of carriage wheels (*Casting.*)	1146	10th May 1853	Octavius Henry Smith. Youngs Parfrey.
Mode of manufacturing metallic handles for knives and forks, backs for razors, bows for scissors and the relative parts of such like instruments.	1428	13th June 1853	William Smith.
Manufacture of handles for knives and other similar articles.	1507	20th June 1853	William Edward Newton.
Machinery or apparatus for preparing and spinning cotton and other fibrous materials (*Bearings.*)	1555	27th June 1853	John Mason. Luke Ryder.
Manufacture of printing rollers	1632	8th July 1853	Moses Poole.
Manufacture of certain drawing or mathematical instruments, also packing or fitting the same in their cases; also applicable to the packing or fitting of other articles	1634	9th July 1853	James Parkes. Samuel Hickling Parkes.
Moulds for steel castings	1637	9th July 1853	Ewald Riepe.
Mode of fastening buttons to garments; an improved button; machinery for manufacturing the same.	1712	19th July 1853	Peter Armand le Comte de Fontainemoreau.
Manufacture of mould candles (*Metallic casing for moulds.*)	1730	22nd July 1853	Alexander Isaac Austen.
Producing castings in malleable iron	1887	12th Aug. 1853	Richard Archibald Brooman.
Axle-box for railway carriages and waggons	1952	22nd Aug. 1853	John Steven.
Application of the slags or refuse matters obtained during the manufacture of metals.	1995	27th Aug. 1853	George Robinson.
Moulding or shaping metals	2058	7th Sept. 1853	David Law. John Inglis.
Manufacture of printing blocks and cylinders (*Forming moulds.*)	2110	12th Sept. 1853	Alfred Vincent Newton.
Permanent way of railways (*Sleepers.*)	2138	14th Sept. 1853	Thomas Swingler.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Improvements in shears	2178	20th Sept. 1853	John Louis Beloud. Samuel Camile Beloud. George Guyatt.
Improvements in lathes	2204	24th Sept. 1853	Alexander Dalgety.
Coupling pipes and other articles; apparatus connected therewith. (*Moulds for casting joint rings.*)	2242	1st Oct. 1853	Charles Coates.
Machinery for manufacturing hoops and wheels (*Moulding cog-wheels.*)	2261	4th Oct. 1853	Peter Rothwell Jackson.
Joining the ends of railways	2311	8th Oct. 1853	Charles May. James Samuel.
Improvements in fire-arms	2409	19th Oct. 1853	John Norton.
Improvements in casting	2450	24th Oct. 1853	James Denoon Young.
Machinery or apparatus for removing patterns from moulds for casting.	2641	14th Nov. 1853	Charles de Bergue.
Improvements in moulding, more particularly applicable to toothed wheels. (*Communicated by Monsieur de Louvrie.*)	2880	10th Dec. 1853	John Henry Johnson.
See also "BELL-FOUNDING." „ "TYPE-FOUNDING."			
XIX—Refining and Calcining; Making Steel.			
Method of manufacturing steel, and of carburizing iron	5	1st Jan. 1853	Joseph John William Watson. William Prosser.
Treatment and manufacture of iron and steel	571	7th March 1853	Thomas Weatherburn Dodds.
Manufacture of iron (*Decarbonising and refining.*)	678	18th March 1853	George Mackay.
Application of retorts in gas-ovens or other ovens, and of gas-ovens or other ovens which are constructed as retorts, to the process of improving iron and converting iron into steel.	929	18th April 1853	William Walker Stephens.
Treating waste products obtained in smelting and otherwise heating ores and minerals; producing a valuable product or products therefrom	1122	6th May 1853	William Longmaid. John Longmaid.
Manufacture of iron (*Melting.*)	1223	18th May 1853	Bernard Peard Walker. James Warren.
Manufacture of railway and other wheel tires (*Refining or hardening the metal.*)	1296	26th May 1853	Jonathan Saunders.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids. (*For calcining.*)	1363	3rd June 1853	Ferdinand Louis Gossart.
Improved cupelo	1430	13th June 1853	Joseph Spencer.
Manufacture of iron	1442	14th June 1853	Joseph Leon Talabot. John Davie Morries Stirling.
Mode of manufacturing cast steel	1443	14th June 1853	Alfred Vincent Newton.
Manufacture of files, rasps, and other edge tools usually made of steel.	1530	23rd June 1853	Thomas Weatherburn Dodds.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Method of melting or fusing iron or metals; apparatus employed therein.	1745	25th July 1853	William Ireland.
Manufacture of cast steel	1907	15th Aug. 1853	Joseph Leon Talabot. John Davie Morries Stirling.
Treatment of copper ores (*Calcining.*)	2380	15th Oct. 1853	Auguste Edouard Loradoux Bellford.
Manufacture and refining of copper	2392	17th Oct. 1853	Capper Pass.
Hardening and tempering steel; grinding, glazing, buffing, and brushing steel and other metallic articles.	2528	1st Nov. 1853	James Chesterman.
Manufacture of iron (*Refining; puddling.*)	2687	18th Nov. 1853	Richard Stuart Norris. Ebenezer Talbott.
Feed-plates to be used for oxydizing lead and refining silver and lead.	2736	24th Nov. 1853	Evan Matthew Richards.
Manufacture of fuel; its preparation and applications for fusing and refining metals, cementation or making steel, and treating salts	2817	3rd Dec. 1853	John Gwynne. James Egleson Anderson Gwynne.
Apparatus for subjecting substances to the action of heat, for carbonizing, calcining, or combining such substances, &c.	2827	5th Dec. 1853	Edward Lavender.
Manufacture of iron (*Refining.*)	2941	17th Dec. 1853	John Davie Morries Stirling.
XV.—Forging, Hammering, Stamping; Hammers and Anvils.			
Steam-machinery used for hammering, stamping, &c.	102	14th Jan. 1853	Frederick Joseph Bramwell. Isham Baggs.
Manufacture of hoops and tires for railway wheels and other purposes.	138	20th Jan. 1853	Peter Rothwell Jackson.
Stamping or shaping metals	206	27th Jan. 1853	James Murdoch.
Machinery for the manufacture of casks, barrels, and other similar vessels. (*Bevelling by hammers.*)	476	25th Feb. 1853	John Grist.
Metallic plates; producing devices or ornamental patterns thereon; apparatus and machinery to be used for such purposes	521	2nd March 1853	John Smith. William Henry Smith. Alexander Williams.
Machinery for forging metals	537	3rd March 1853	Samuel Colt.
Machine or instrument for forging metal	545	4th March 1853	Robert Craib Ross.
Treatment and manufacture of iron and steel (*Working steam-hammers, &c.*)	571	7th March 1853	Thomas Weatherburn Dodds.
Manufacturing screw-bolts, spikes, and rivets, and other similar articles; machinery or apparatus used for such manufacture;—partly applicable for forming screw-threads, mouldings, and ornaments on metal.	698	22nd March 1853	Samuel M'Cormick.
Manufacture of dowels used in joinery	733	28th March 1853	George Oakes Asbury.
Machinery or apparatus for forging, stamping, &c. iron or other substances. (*Steam-hammer.*)	816	5th April 1853	Joseph Haley.
Welding cast-steel with iron, steel, cast-iron, and other metals. (*And hammering; facing anvils.*)	880	12th April 1853	François Felix Verdié.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Construction of railways - - - - (*Forging rails.*)	962	21st April 1853	Henry Carr.
Improvements in steam-hammers - - -	1054	30th April 1853	John Balmforth. William Balmforth. Thomas Balmforth.
Machinery for forging, stamping, or otherwise treating metals and other similar materials.	1060	2nd May 1853	James Reeves.
Construction or manufacturing of tuyeres - -	1139	9th May 1853	Peter Wright.
Manufacture of watches and watch-cases; tools and apparatus employed therein. (*Stamping watch-cases.*)	1140	9th May 1853	Thomas Quaife.
An improved forge-hammer - - - (*Communicated by Jean Schmerber.*)	1272	23rd May 1853	John Henry Johnson.
Machinery for forging iron and other metals -	1353	2nd June 1853	Richard Longden Hattersley.
Method of making table-knife blades - -	1653	12th July 1853	William Levesley.
Manufacture of anvils - - - -	1673	14th July 1853	Richard Archibald Brooman.
Construction of portable metallic folding bedsteads, chair-bedsteads, chairs, sofas, couches, settees, and such like articles for the use of emigrants and others;—partly applicable to ordinary bedsteads, sofas, couches, chairs, and such like articles in general.	1710	18th July 1853	Samuel Perkes.
Stamping or shaping metals - - -	1729	22nd July 1853	James Murdoch.
Apparatus for forging, shaping &c. iron and other materials.	1843	6th Aug. 1853	Robert Morrison.
Improvements in forge-hammers - - -	1869	11th Aug. 1853	Thomas Kelley Hall.
An improved construction of steam-hammer -	1994	27th Aug. 1853	Alfred Vincent Newton.
Machinery for forging metals - - -	2040	3rd Sept. 1853	Gage Stickney.
Method of forging or manufacturing iron and steel.	2116	13th Sept. 1853	Henry Dubbs.
Improvements in pistons and piston-rods of steam-hammers and pile-drivers, and in the parts in immediate connection therewith	2500	29th Oct. 1853	James Nasmyth.
Manufacture of open caps for sticks of umbrellas and parasols. (*Stamping.*)	2575	5th Nov. 1853	John Rubery.
Certain improvements in apparatus or machines for forging or forming spindles, rollers, bolts, and various other articles in metal.	2615	11th Nov. 1853	John Platt.
Manufacture of bar and sheet metals; machinery connected therewith; application of such metals to various useful purposes. (*Stamping.*)	2662	17th Nov. 1853	John Clare, junior.
Improvements in forge-hammers - - -	2883	10th Dec. 1853	Nicolas Victor Guibert.
Improvements in the helves of tilt-hammers -	2908	15th Dec. 1833	Joseph Bennett Howell. John Shortridge.
Manufacture of certain kinds of metallic vessels - (*Stamping.*)	2938	17th Dec. 1853	Joshua Horton.
Machinery for manufacturing needles and fish-hooks.	2947	19th Dec. 1853	Henry Milward.
Improvements in portable forges - - -	2952	19th Dec. 1853	Richard Waygood.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Manufacture of tubes of copper and its alloys - (*Hammering.*)	3015	29th Dec. 1853	Edward Estivant.
Portable forges - - - - - -	3036	31st Dec. 1853	Richard Waygood.
See also "FURNACES."			
„ "OVENS, &c."			
„ "NAILS, &c."			
V.—Rolling, Welding, Bending, and Pressing.			
Construction of wrought-iron wheels to be used upon railways or for other purposes; machinery or apparatus connected therewith - -	111	17th Jan. 1853	Thomas Cropper Ryley. Edward Evans.
Coating iron with copper and brass - - (*And rolling bolts.*)	421	17th Feb. 1853	Charles Watt. Hugh Burgess.
Manufacture of malleable iron and other metals - (*Rolling.*)	426	18th Feb. 1853	William Darling.
Manufacturing coated metal - - - (*Rolling.*)	553	4th March 1853	John Davie Morries Stirling.
Manufacturing casks, vats, and other like vessels; machinery or apparatus to be employed for such purpose - - - - - - (*Rolling the hoops.*)	636	14th March 1853	Bennett Alfred Burton. Henry Mortimer Burton.
Rolling and shaping malleable metals - -	701	22nd March 1853	William Johnson.
Manufacture of railway-tires - - -	780	1st April 1853	Jonathan Saunders.
Machinery for manufacturing and rolling iron -	804	4th April 1853	Charles May.
Construction of metallic beams or bracings and metallic sheets or plates, applicable to the building of ships and other structures where lightness and strength are required. (*Welding, rolling, and bending.*)	827	6th April 1853	William Radford.
Welding cast steel with iron, steel, cast iron, and other metals. (*Rolling.*)	880	12th April 1853	François Felix Verdié.
Manufacture of wheels - - - - -	908	14th April 1853	Charles Green. James Newman.
Apparatus for rolling iron - - - -	1097	4th May 1853	William Edward Newton.
Manufacture and piling of iron to be used in the production of railway-chairs - - -	1400	7th June 1853	Thomas Davis. Boaz Bloomer. Boaz Bloomer, junior.
Manufacture of sheet iron and iron plates used for boilers, vessels, buildings, and other like purposes.	1449	15th June 1853	Charles Wye Williams.
Formation of such metallic plates as are required to be conjoined by rivetting or other similar fastening. (*Rolling.*)	1529	23rd June 1853	James Burrows.
Machinery and apparatus employed in rolling plates and bars of iron and other metals.	1680	14th July 1853	James Nasmyth.
Rolling metals - - - - - -	1815	3rd Aug. 1853	William Sargeant Roden. William Thomas.
Rolling iron and all other malleable metals and alloys.	1824	4th Aug. 1853	Richard Brown Roden.
Manufacture of rails and parts of railways, and tires of railway-wheels. (*Piling iron.*)	1991	27th Aug. 1853	John Davie Morries Stirling.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Machinery to be used in the manufacture of metallic pens and penholders (*Bending.*)	2028	2nd Sept. 1853	John Hinks. George Wells. Frederick Dowler.
Formation or construction of rolled metallic plates	2069	8th Sept. 1853	James Burrows.
Method of forging or manufacturing iron and steel (*Pressing.*)	2116	13th Sept. 1853	Henry Dubbs.
Shaping metals (*Pressing.*)	2229	29th Sept. 1853	John Phillips.
Machinery for manufacturing hoops and wheels (*Rolling-mills.*)	2261	4th Oct. 1853	Peter Rothwell Jackson.
Joining the ends of railways (*Welding.*)	2311	8th Oct. 1853	Charles May. James Samuel.
Revolving shutters and other closures for portable and other buildings	2341	12th Oct. 1853	Patrick Clark Alexander Clark.
Manufacture of certain kinds of metallic vessels (*Welding.*)	2482	26th Oct. 1853	Amédée François Rémond.
Improvements in the manufacture of malleable iron, which improvements are also applicable to the manufacture of other malleable metals. (*Preparing for welding and rolling.*) (*Communicated by Clement Desormes.*)	2568	4th Nov. 1853	John Henry Johnson.
Improvements in shaping metals (*Rolling wire.*)	2622	12th Nov. 1853	Stephen Barker.
Manufacture of bar and sheet metals; machinery connected therewith;—application of such metals to various useful purposes. (*Rolling.*)	2662	17th Nov. 1853	John Clare, junior.
Manufacture of iron (*Rolling bars.*)	2757	26th Nov. 1853	Joseph Stenson.
Machinery for making pipes, sheets, still-worms and other articles, from that class of metals called soft metals, as lead, tin, zinc, bismuth, or alloys of soft metals that are capable of being forced out of metal-receivers or chambers through dies, cores &c. (*Hydraulic press.*)	2784	30th Nov. 1853	Edward Keating Davis.
Manufacture of rails for railways (*Rolling.*)	2812	2nd Dec. 1853	Jonathan Saunders.
Construction of metallic bridges and other similar structures (*Rolling rails.*)	2818	3rd Dec. 1853	Henry Jeremiah Iliffe. James Newman.
Manufacture of certain kinds of metallic vessels (*Rolling.*)	2938	17th Dec. 1853	Joshua Horton.
Formation of such metallic plates as are required to be conjoined by rivetting or other similar fastening. (*Rolling lap-joints.*)	2962	20th Dec. 1853	James Burrows.
For Wire-drawing—*see* "WIRE." For Rolling Tubes—*see* "PIPES, &c."			
VI.—Cutting, Sawing, and Planing.			
Manufacturing percussion-caps	55	8th Jan. 1853	John Abraham.
Machinery for cutting or shearing iron and other metals.	250	31st Jan. 1853	Walter Williams.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Railways - - - - - - - (*Brackets and sleepers.*)	412	17th Feb. 1853	William Bridges Adams.
Improvements in fishes and fish-joints for connecting the rails of railways. (*Planing.*)	651	16th March 1853	Charles Heard Wild.
Manufacture of textile materials - - - (*Grooving drawing-rollers.*)	722	24th March 1853	William Edie.
Machinery or apparatus for cutting iron or other substances—"Steam Hammer."	816	5th April 1853	Joseph Haley.
Machinery for cutting, carving &c. metal and other suitable materials.	856	9th April 1853	George Searby.
Machinery for cutting and uniting metals - -	867	11th April 1853	Hugh Donald.
Cutting out and piercing metals - - -	897	13th April 1853	Thomas Lovell Preston.
Machinery for cutting or shearing metals - -	1071	3rd May 1853	Thomas Claridge.
Machinery for manufacturing screws - -	1076	3rd May 1853	Severin Virgile Bonneterre.
Improvements in turning-lathes, partly applicable to other useful purposes.	1410	9th June 1853	William Muir.
Machinery or apparatus for cutting discs or circles out of plates or sheets of metal or other substances - - - - - -	2033	2nd Sept. 1853	John Sibley. Thomas Sibley.
Mode or method of cutting and finishing brass rule and wood reglet used in the art or process of letterpress printing and other similar purposes; machinery or apparatus employed therein	2073	9th Sept. 1853	Philip Grant. John Doherty.
Improvements in lathes and in apparatus connected therewith for cutting &c. metal or other substances.	2103	12th Sept. 1853	William Weild.
Manufacture of taper tubes; apparatus connected therewith.	2181	20th Sept. 1853	Ferdinand Potts.
Machinery for the manufacture of casks and barrels (*Bevelling the hoops.*)	2183	20th Sept. 1853	Stephen Neal. William Blanchard Jerrold. Conrad Montgomery.
Machinery for cutting metal or other substances -	2225	28th Sept. 1853	William Edward Newton.
Means of cutting, carving &c. metallic or other surfaces.	2382	15th Oct. 1853	Thomas Woodcock.
Machinery or apparatus for cutting and shaping metals and other substances.	2508	31st Oct. 1853	Joseph Haley.
Cutting-tools; working of iron, brass, and other metals and materials - - - - - (*Planing.*)	2526	1st Nov. 1853	John Whitehead. Thomas Whitehead.
Manufacture of swords, bayonets, and sword-bayonets.	2550	3rd Nov 1853	Charles Reeves, junior.
Casks, and machinery or apparatus for the manufacture of casks - - - - (*Sawing corrugated plates.*)	2555	3rd Nov. 1853	George Duncan. John Boyd. John Barker.
Machinery or apparatus for tenoning, mortising; and sawing metal or other materials.	2800	2nd Dec. 1853	James Reilly.
VII.—Boring, Drilling, Punching, and Rivetting.			
Application of steam to the propulsion of carriages on common roads;—partly applicable to the construction of carriages for common roads. (*And drilling.*)	53	8th Jan. 1853	Robert Lovely.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Railways (*Boring brackets.*)	412	17th Feb. 1853	William Bridges Adams.
Manufacturing casks, vats, and other like vessels; machinery or apparatus to be employed for such purpose (*Punching and rivetting.*)	636	14th March 1853	Bennett Alfred Burton. Henry Mortimer Burton.
Machine for mortising and tenoning, drilling and boring.	663	18th March 1853	Richard Peters.
Mode of connecting sheets of corrugated iron when used in the construction of roofs, iron houses, and other purposes. (*By strips and rivetting.*)	697	22nd March 1853	Edwin Maw.
Production of ornamental surfaces in metals and similar materials. (*Punching.*)	828	6th April 1853	William Johnson.
Machinery for cutting, carving, and engraving wood, stone, metal, and other suitable materials. (*Also drilling.*)	856	9th April 1853	George Searby.
Machinery for cutting and uniting metals (*Punching and rivetting.*)	867	11th April 1853	Hugh Donald.
Cutting out and piercing metals	897	13th April 1853	Thomas Lovell Preston.
Improvements in steam-hammers (*For rivetting.*)	1054	30th April 1853	John Balmforth. William Balmforth. Thomas Balmforth.
Formation of such metallic plates as are required to be conjoined by rivetting or other similar fastening.	1529	23rd June 1853	James Burrows.
Manufacture of files, rasps, and other edge-tools usually made of steel. (*Augers and rose-bits.*)	1530	23rd June 1853	Thomas Weatherburn Dodds.
Machinery for boring metals	1703	16th July 1853	Samuel Colt.
Construction of iron houses, vessels, masts, spars, smoke-funnels, boilers, cylinders, beams, and other like structures or articles. (*Rivetting.*)	2042	5th Sept. 1853	John Clare, junior.
Improvements in lathes and in apparatus connected therewith for boring metal or other substances.	2103	12th Sept. 1853	William Weild.
Improvements in lathes (*For boring.*)	2204	24th Sept. 1853	Alexander Dalgety.
Machines for drilling or boring metals or other substances.	2296	7th Oct. 1853	Joseph Porter.
Joining the ends of railways (*Drilling.*)	2311	8th Oct. 1853	Charles May. James Samuel.
Means of piercing &c. metallic or other surfaces	2382	15th Oct. 1853	Thomas Woodcock.
Machinery or apparatus for boring and shaping metals and other substances.	2508	31st Oct. 1853	Joseph Haley.
Cutting-tools; working of iron, brass, and other metals and materials	2526	1st Nov. 1853	John Whitehead. Thomas Whitehead.
Spindles and bearings of drilling machines	2580	7th Nov. 1853	John Todd.
Machinery for the production of iron ships and other similar structures.	2873	9th Dec. 1853	John Bourne.
Manufacture of umbrellas and parasols (*Rivetting apparatus.*)	2911	15th Dec. 1853	Aignan Bernard Callier.
Machinery for manufacturing needles and fish-hooks	2947	19th Dec. 1853	Henry Milward.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Formation of such metallic plates as are required to be conjoined by rivetting or other similar fastening.	2962	10th Dec. 1853	James Burrows.
Setting out and marking the rivet-holes in the plates used in constructing iron ships, boats, boilers, and other vessels. (*Template.*)	2964	20th Dec. 1853	Archibald Thomson.
Apparatus for drilling or boring metals and other substances.	2993	24th Dec. 1853	Joseph Lewis.
Machines used for rivetting together metallic plates	3028	30th Dec. 1853	Walter Mabon.
VIII.—Annealing and Soldering.			
Manufacture of tubes; application of tubes to certain purposes - - - - - - (*Soldering.*)	110	17th Jan. 1853	Thomas Potts. James Septimus Cockings.
Apparatus for heating and annealing metals -	654	16th March 1853	Samuel Colt.
Needles or wires used in the manufacture of carpets, looped pile fabrics, and velvets - - (*Brazing.*)	2075	9th Sept. 1853	Edwin Lumby. Zacchæus Sugden.
Construction of ovens and furnaces - - - (*Annealing-pots.*)	2521	1st Nov. 1853	John Crowley.
IX.—Plating, Gilding, Depositing, and Ornamenting.			
Manufacture of spoons and forks and other similar articles for domestic use. (*Plating.*)	401	16th Feb. 1853	Job Cutler.
Coating iron with copper and brass - -	421	17th Feb. 1853	Charles Watt. Hugh Burgess.
Steam-boilers - - - - - - (*Coating pipes.*)	447	21st Feb. 1853	John Charles Pearce.
Application of porcelain and similar materials to ornamenting purposes. (*Coating iron &c.*)	637	14th March 1853	John Henry Johnson.
Manufacture of knives and forks - - - (*Tinning tangs.*)	756	29th March 1853	George Shaw.
Compositions for coating metal and other materials exposed to the action of sea water or the weather	976	22nd April 1853	Edward Onslow Aston. George Germaine.
Combining india-rubber with certain metals - (*Gilding in devices.*)	1095	22nd April 1853	Charles Goodyear.
Coating or plating vessels and other articles for the better resistance of the action of acids and salts.	1138	9th May 1853	John Henry Johnson.
Taking impressions and producing printing-surfaces - - - - - - - (*Electrotyped copper plate.*)	1164	11th May 1853	William Bradbury. Frederick Mullet Evans.
Locks and keys;—partly applicable to window-sashes and doors.	1310	27th May 1853	William Henry Bentley.
Impregnating, saturating, or coating threads, yarns, and fabrics with metal—"Metallic dyeing." (*Communicated by Charles Depoully.*)	1593	2nd July 1853	Richard Archibald Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
Improvements in carriages, scaffoldings and ladders, which scaffoldings and ladders are used as carriages. (*Coating tubes with metal.*)	1599	4th July 1853	Marcus Davis.
Depositing metals or alloys of metals - -	1777	29th July 1853	William Edward Newton.
Process of coating cast iron with other metals and the alloys of other metals.	1836	5th Aug. 1853	William Newton.
Manufacture and ornamenting or coating of articles when compounds containing india-rubber are used. (*Electro-plating.*)	2009	30th Aug. 1853	Charles Goodyear.
Application of the processes of lithographic and zincographic printing of words, patterns, designs, and marks, on metal and other hard and unyielding substances, in sheets, slabs, or flat pieces, with or without the intervention of paper or other flexible material - - - - - -	2115	13th Sept. 1853	Charles Frederick Adams. William Gee. George Davis.
Mode of protecting iron of every kind against the action of the weather, of rain, river, spring, and sea water, so that iron thus protected may be used for roofing, for cisterns, pipes, gutters, window-frames, telegraphic wires for marine and various other purposes.	2215	27th Sept. 1853	Nicholas Callan.
Manufacture and ornamenting of china, porcelain, and pottery wares. (*Electro-plating.*)	2292	7th Oct. 1853	William Ellis.
Improvements in mantel-pieces - - -	2309	8th Oct. 1853	William Potts.
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for roofing, cisterns, baths, gutters, pipes, window-frames, telegraphic wires for marine and various other purposes.	2340	12th Oct. 1853	Nicholas Callan.
Daylight reflectors; apparatus to be used in connection therewith - - - - -	2458	25th Oct. 1853	John Fordred. Thomas Boyle.
Deposition of metals and metallic alloys - -	2579	7th Nov. 1853	Henry Pershouse. Timothy Morris.
Ornamenting woven fabrics and other surfaces - (*By electro-deposition.*)	2746	25th Nov. 1853	Alexander Drew.
Machinery for making pipes, sheets, still-worms and other articles, from that class of metals called soft metals, as lead, tin, zinc, bismuth, or alloys of soft metals that are capable of being forced out of metal-receivers or chambers through dies, cores &c. (*Lining with metal; plating.*)	2784	30th Nov. 1853	Edward Keating Davis.
Printing oil-cloths and other fabrics - - (*Producing electrotype plates.*) (*Communicated by Benjamin Underwood.*)	2836	6th Dec. 1853	John Henry Johnson.
Coating silk and other yarn or thread with gold or other metal.	2985	23rd Dec. 1853	Francis Bennoch.

For Sheathing Ships—*see* "COATING, &c."
For Coating Wire—*see* "COATING, &c."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS—*continued.*			
X.—Metallic Alloys.			
A new composition of different metals or metallic substances.	35	6th Jan. 1853	Edme Augustin Chameroy.
Combining metals for the bearings and packings of machinery.	217	28th Jan. 1853	James Pole Kingston.
Alloys of metal and other substances; application of the same to various useful purposes.	322	5th Feb. 1853	André Michel Massonnet.
Production of ornamental surfaces in metals and similar materials. (*Parti-coloured designs.*)	828	6th April 1853	William Johnson.
Method of forming designs and patterns upon metal and other surfaces.	1714	19th July 1853	Charles Breese.
A new metallic composition - - -	2623	12th Nov. 1853	François Amand d'Elande.
Manufacture of metallic compounds - -	2626	12th Nov. 1853	John Gedge.
Improved metallic alloy - - - -	3026	30th Dec. 1853	Henri Catherine Camille de Ruolz. Anselme de Fontenay.
METERS FOR GAS AND FLUIDS.			
Engines to be worked by steam or other fluid -	258	31st Jan. 1853	Frederick Lawrence. William Davison. Alfred Lawrence.
Gas-weighing meter - - - -	623	12th March 1853	John Fry Heather, M.A.
Rotatory fluid meters - - - -	712	24th March 1853	Charles William Siemens. Joseph Adamson.
Apparatus for measuring gas, water, and other fluids	773	31st March 1853	George Hanson.
Meter for measuring and indicating the measure of liquids.	965	21st April 1853	William Robjohn.
Apparatus for vapourizing benzole or other suitable volatile hydro-carbon and mixing it with atmospheric air, so that the mixture may be burnt for the purposes of illumination or otherwise.	1047	29th April 1853	Oliver P. Drake.
Apparatus for measuring and for governing the flow of water and other liquids.	1096	4th May 1853	Thomas Taylor.
Improvements in dry gas-meters - - -	1197	14th May 1853	William John Warner.
Apparatus for measuring liquids, gases, and other elastic fluids, and for regulating the flow thereof.	1525	22nd June 1853	Charles Topham.
Steps or bearings of the axles or shafts of gas-meters.	2604	10th Nov. 1853	James Stevens.
Improvements in gas-meters - - -	2899	14th Dec. 1853	John Zuill Kay.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MINCING MEAT.			
Machines for cutting and mincing meat and other materials for sausages and other like purposes, and for filling the prepared skins with the meat and other materials when so cut.	312	4th Feb. 1853	George Letts.
MINING AND QUARRYING.			
Crushing, drilling, or otherwise treating ores, stone, quartz or other substances, in mining operations; machinery or apparatus connected therewith.	376	12th Feb. 1853	William Pidding.
Method of raising water and other materials from mines.	672	18th March 1853	George Rock Lucas.
Working mines - - - - -	1381	4th June 1853	Benjamin Biram.
Machinery for drilling or boring rocks or other hard substances.	1506	20th June 1853	William Edward Newton.
Tools or implements to be used for boring or cutting rock or other hard substances for the purpose of blasting.	2143	15th Sept. 1853	Henry Kraut.
Arranging and working mining engines - -	2157	16th Sept. 1853	Andrew Barclay.
Hewing and excavating coal, cannel, and other minerals, strata, and substances, by certain machinery and appliances thereto.	2262	4th Oct. 1853	William Peace.
Firing explosive compounds - - - (*For blasting.*)	2264	4th Oct. 1853	John Norton.
Machinery for raising coal and minerals from collieries and mines - - - -	2714	22nd Nov. 1853	Frederick Levick. Joseph Fieldhouse.
Machinery for drilling or boring rocks and other hard substances.	2854	8th Dec. 1853	William Edward Newton.
An improvement in "blasting powder" for mining and other operations of a similar nature.	2910	15th Dec. 1853	Auguste Edouard Loradoux Bellford.
Improvements in ascending and descending mines and shafts, and in apparatus connected therewith, by which improvements the ventilation of mines is increased.	3027	30th Dec. 1853	Joseph Marlor.
MOTIVE-POWER MACHINES.			
I.—Air and Gas Engines.			
Motive-power engines; application of motive-power to the same.	12	3rd Jan. 1853	Edme Augustin Chameroy.
Atmospheric engines - - - -	20	5th Jan. 1853	William Edward Newton.
Obtaining motive-power - - -	21	5th Jan. 1853	Jean Baptiste Pascal.
Obtaining motive-power - - -	100	14th Jan. 1853	John Henry Vries.
Engines to be worked by steam or other fluid -	258	31st Jan. 1853	Frederick Lawrence. William Davison. Alfred Lawrence.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER MACHINES—*continued.*			
Obtaining motive-power	362	10th Feb. 1853	Robert Roger.
Application of atmospheric currents to the obtainment of motive-power.	419	17th Feb. 1853	George Leopold Ludwig Kufahl.
Obtaining motive-power	435	19th Feb. 1853	James Anderson.
Obtaining power by steam and air	493	26th Feb. 1853	Charles Tetley.
A new mode of obtaining and using power by explosion of gases.	515	1st March 1853	Robert Lewin Bolton.
Production of motive-power	516	2nd March 1853	Laurence Hill, junior.
Rotatory engines for obtaining motive-power and for transmitting aëriform bodies and fluids.	532	3rd March 1853	Robert Barclay.
Obtaining power when air is employed	692	21st March 1853	Moses Poole.
Apparatus applicable for obtaining motive-power	773	31st March 1853	George Hanson.
Engines to be worked by air or gases	793	4th April 1853	William Edward Newton.
Machinery to be actuated by water or air	855	9th April 1853	George Frederick Goble.
Obtaining motive-power	1248	20th May 1853	Edward Jones Schollick.
Rotary engines to be driven by vapour, fluid, or gas	1251	20th May 1853	Auguste Edouard Loradoux Bellford.
Engines to be worked by air, or air and water combined.	1336	31st May 1853	George Goodlet.
Obtaining motive-power	1408	9th June 1853	Antoine Ponçon.
Engines for developing mechanical power by the action of heat on air and other elastic fluids	1416	9th June 1853	James Robert Napier. William John Macquorn Rankine.
Obtaining motive-power	1436	13th June 1853	Joseph Webb.
Revolving engine to be worked by air or gases &c.	1445	15th June 1853	Arthur Parsey.
Obtaining motive-power	1569	29th June 1853	John Imray.
Obtaining and applying motive-power	1577	30th June 1853	Joseph Webb.
Obtaining power by compressed air	1630	8th July 1853	Louis Brunier.
Gas and air engines	1648	11th July 1853	Fabian Wrede.
Engines worked by air or fluids	1736	23rd July 1853	William Huntley.
Obtaining power by the aid of an electric current for motive and telegraphic purposes. (*And a gas-battery.*)	2032	2nd Sept. 1853	Augustino Carosio.
Engine to be worked by air &c.	2052	6th Sept. 1853	James Davis. Robert Ramsay.
Obtaining motive-power by the aid of air and other expansive gases.	2173	19th Sept. 1853	John Stephens.
Obtaining power by carbonic acid gas	2446	22nd Oct. 1853	Hume Greenfield.
Improved application of magneto-electricity for driving machinery and for neutralizing the impulsive force of machinery in motion. (*A machine driven by hot air.*)	2764	26th Nov. 1853	Joseph Scipion Rousselot.
Obtaining motive-power by means of heated gases	2768	28th Nov. 1853	Prix Charles Jean Baptiste Sochet.
Machinery or apparatus for obtaining and applying motive-power	2850	8th Dec. 1853	Joseph Goddard. Charles Yates.
Obtaining and applying motive-power	2867	12th Dec. 1853	William Evans.

See also "VALVES, &c."
For Governors—*see* "STEAM AND OTHER GOVERNORS, &c."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER MACHINES—*continued.*			
XI.—Steam Engines.			
Motive-power engines; application of motive-power to the same.	12	3rd Jan. 1853	Edme Augustin Chameroy
Obtaining motive-power	21	5th Jan. 1853	Jean Baptiste Pascal.
Steam-machinery used for driving piles, hammering, stamping, and crushing	102	14th Jan. 1853	Frederick Joseph Bramwell Isham Baggs.
Steam-engines	120	18th Jan. 1853	John Thornborrow Manifold. Charles Spencer Lowndes.
Steam engines;—applicable wholly or in part to pumps and other motive-engines.	136	19th Jan. 1853	Joseph Maudslay.
Steam-engines	208	27th Jan. 1853	William Galloway. John Galloway.
Transmitting motive-power to machinery; regulating the action of rotary-machines. (*Steam engines.*)	239	29th Jan. 1953	William Constable.
Engines to be worked by steam or other fluid	258	31st Jan. 1853	Frederick Lawrence. William Davison. Alfred Lawrence.
Improved rotary engine	275	1st Feb. 1853	James Carter.
Steam-engines	331	7th Feb. 1853	William Scott. Robert Brough. James Rinoe. Thomas Mann.
Marine-engines	346	9th Feb. 1853	John Seaward.
Steam-engines	356	10th Feb. 1853	James Anderson.
Rotary engines	394	15th Feb. 1853	Adolphe Nicoll.
Emission or reaction engines	480	25th Feb. 1853	Henry Martyn Nicholls.
Construction of locomotive-engines	485	26th Feb. 1853	Jean Joseph Fréchin.
Locomotive-engines	506	1st March 1853	Robert Stephenson, junior.
Steam-engines	525	2nd March 1853	Robert Waddell.
Improvements in locomotives, part of which improvements are applicable to other steam-engines.	533	3rd March 1853	Auguste Edouard Loradoux Bellford.
Steam-engines	558	5th March 1853	William Todd.
Apparatus for converting reciprocating into rotatory motion for steam-engines and for other purposes.	578	8th March 1853	Charles Finlayson.
Steam-engines	667	18th March 1853	John Henry Johnson.
Steam-engines and pressure-regulating valves	668	18th March 1853	Malcolm Baxter.
Certain improvements in steam-engines	721	24th March 1853	William M'Naught.
Engines to be worked by steam or any other elastic fluid; apparatus for generating such steam or other elastic fluid.	735	28th March 1853	David Stephens Brown.
Improvements in steam-engines (*Marine.*)	738	28th March 1853	John Scott, Junior. George William Jaffrey.
Certain improvements in springs, and also in the modes of their application to railway-engines.	745	29th March 1853	Thomas Hill.
Improvements in locomotive-engines	786	2nd April 1853	Sir James Caleb Anderson, Bart.
Certain improvements in steam-engines	787	2nd April 1853	George Holcroft. William Jennings Hoyle.
Steam-engines; apparatus connected therewith	797	4th April 1853	William Beckett Johnson.
Steam-engines (*Marine.*)	874	12th April 1853	Henry William Harman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER MACHINES—*continued.*			
Portable and locomotive steam-engines	886	13th April 1853	Nathaniel Clayton. Joseph Shuttleworth.
Improvements in the construction of locomotive-engines;—partly applicable to other engines.	888	13th April 1853	William Pearce.
Improvements in steam-engines	889	13th April 1853	Thomas Edwards.
Working the air-pumps of steam-engines	891	13th April 1853	Douglas Hebson.
Rotary steam-engine	938	19th April 1853	François George Sicardo.
Improvements in steam-engines	963	21st April 1853	James Petrie.
Improvements in steam-engines	1070	2nd May 1853	Honoré Mane.
Obtaining motive-power	1077	3rd May 1853	Edward Thomas Bainbridge.
Marine steam-engines	1094	4th May 1853	John Scott Russell.
Obtaining motive-power	1141	10th May 1853	Frederick Lipscombe.
Direct acting steam-engines with fixed cylinders	1171	11th May 1853	William Bull.
Improvements in rotatory engines	1184	13th May 1853	Charles Tetley.
Improvements in steam-engines, &c.	1194	14th May 1853	Thomas Stephen Holt.
Certain improvements in steam-engines	1201	14th May 1853	Peter Armand le Comte de Fontainemoreau.
Improvements in rotatory engines	1216	17th May 1853	Joseph Webb.
Steam-engines suitable for agricultural purposes and to locomotion on common roads.	1240	19th May 1853	John Hippisley.
Rotary engines to be driven by steam or any vapour, fluid, or gas &c.	1251	20th May 1853	Auguste Edouard Loradoux Bellford.
Construction of locomotives	1305	27th May 1853	Claude Arnoux.
Condensing steam-engines	1331	30th May 1853	John Champney Bothams.
Engines to be worked by steam, air, or air and water combined.	1336	31st May 1853	George Goodlet.
Improvements in the mode of and in engines for applying motive-power.	1389	6th June 1853	Anthony Bernard Baron Von Rathan.
Revolving engine to be worked by steam &c.	1445	15th June 1853	Arthur Parsey.
Improvements in and applicable to steam-engines	1459	16th June 1853	Edward Walmsley. John Holmes.
Steam-engines; production of steam for the same	1491	18th June 1853	John Moore Hyde.
Certain improvements in railways and locomotives running thereon, which improvements facilitate the ascension of steep inclines.	1548	25th June 1853	Antoine Andraud.
Obtaining motive-power	1569	29th June 1853	John Imray.
Rotatory engines	1677	14th July 1853	John Yule.
Engines worked by steam, air, or fluids	1736	23rd July 1853	William Huntley.
Steam-engines and boilers for marine purposes	1775	29th July 1853	James Edward McConnell.
Certain improvements in steam-engines	1801	2nd Aug. 1853	John Griffiths.
Steam-engines and boilers	1857	10th Aug. 1853	George Parsons.
Improvements in evaporating	1895	13th Aug. 1853	Frederick Lipscombe.
Rotatory steam-engines	1908	15th Aug. 1853	Alexander Dalgety.
Improvements in steam-engines	1927	17th Aug. 1853	George Leedham Fuller.
Steam-engines; apparatus connected therewith	2022	31st Aug. 1853	William Beckett Johnson.
Rotary engines to be worked by steam or other fluid.	2037	3rd Sept. 1853	Thomas Walker.
Engine to be worked by steam, air, or water	2052	6th Sept. 1853	Thomas Davis. Robert Ramsay.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER MACHINES—*continued.*			
Improvements in steam-engines	2093	10th Sept. 1853	Edwin Scragg.
Certain improvements in steam-engines	2130	14th Sept. 1853	John Jonathan George Collins.
Obtaining motive-power by the aid of steam and other expansive gases.	2173	19th Sept. 1853	John Stephens.
Certain improvements in steam-engines	2232	29th Sept. 1853	James Griffiths.
Improvements in steam-engines	2281	6th Oct. 1853	John Milner.
Improvements in steam-engines	2326	11th Oct. 1853	William Beardmore. William Rigby.
Obtaining and applying motive-power	2477	26th Oct 1853	Freiderich Ludewig Hahn Danchell. William Startin.
Obtaining steam-power; regulating the same	2541	2nd Nov. 1853	Frederick Lipscombe.
Machinery for obtaining and applying motive-power, and for raising and forcing fluids.	2557	3rd Nov. 853	Joseph Henry Tuck.
Improvements in and applicable to steam-engines	2571	5th Nov. 1853	Samuel Harrison.
Steam-machinery and pumps for lifting water from mines and other places	2573	5th Nov. 1853	Charles Carr. William Kyle Horsley.
Steam-engines; apparatus for indicating the pressure of steam.	2577	5th Nov. 1853	William Beckett Johnson.
Improvements in steam-engines	2583	7th Nov. 1853	Jonathan Grinrod. Alexander Hunter.
A new rotatory steam-engine	2609	11th Nov. 1853	Alexander André Victor Sarrazin de Montferrier.
An improvement in steam-engines	2672	18th Nov. 1853	Patrick Francis Keogh. William Ashley Wilson.
Improvements in surface condensers, and in evaporators and heaters for steam-engines.	2682	18th Nov. 1853	Moses Poole.
Certain improvements in marine steam-engines	2706	21st Nov. 1853	William Joyce. Thomas Meacham.
Improvements in steam-engines	2728	23rd Nov. 1853	William Beckett Johnson.
Improvements in rotatory engines	2740	24th Nov. 1853	Daniel Lancaster Banks.
Improvements in rotary engines	2751	25th Nov. 1853	Auguste Edouard Loradoux Bellford.
Obtaining motive-power by means of heated gases	2768	28th Nov. 1853	Prix Charles Jean Baptiste Sochet.
Steam-engines; apparatus connected therewith	2866	9th Dec. 1853	James Sutcliffe.
Improvements in steam-engines	2872	9th Dec. 1853	John Bourne,
Obtaining and applying motive-power	2887	12th Dec. 1853	William Evans.
Obtaining motive-power	2912	15th Dec. 1853	Jean Baptiste Pascal.
Rotary steam-engine	3005	28th Dec. 1853	William Unett Coates.

See also "VALVES, &c."
For Governors—*see* "STEAM AND OTHER GOVERNORS, &c."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER MACHINES—*continued.*			
XIII.—Water-wheels and Engines.			
Apparatus or mechanism for driving machinery through the agency of water.	18	4th Jan. 1853	Charles John Burnett.
Machine for obtaining motive-power - -	118	17th Jan. 1853	Auguste Edouard Loradoux Bellford.
Apparatus applicable for obtaining motive-power -	773	31st March 1853	George Hanson.
Production of motive-power—"The counteracting reaction motive-power engine."	809	4th April 1853	William Willcocks Sleigh.
Machinery to be actuated by water or air - -	855	9th April 1853	George Frederick Goble.
Engines to be worked by air and water combined -	1336	31st May 1853	George Goodlet.
Obtaining motive-power - - - - -	1408	9th June 1853	Antoine Ponçon.
Machinery for propelling vessels and other machinery—"A crank propeller" - - -	1439	14th June 1853	Joseph H. Penny. Thomas B. Rogers.
Revolving engine to be worked by water &c. -	1445	15th June 1853	Arthur Parsey.
Apparatus which may be applied to the obtaining of motive-power.	1525	22nd June 1853	Charles Topham.
Engine to be worked by water &c. - -	2052	6th Sept. 1853	James Davis. Robert Ramsay.
Hydraulic engines - - - - - - (*Water-wheels.*)	2220	28th Sept. 1853	Louis Dominique Girard.
Obtaining and applying motive-power - -	2887	12th Dec. 1853	William Evans.
See also "VALVES, &c." For Governors—*see* "STEAM AND OTHER GOVERNORS, &c."			
XIV.—Electro-magnetic Engines.			
A hydro-dynamic battery or new electro-magnetic apparatus, which with its products is applicable to the production of motive-power &c. - -	575	7th March 1853	Augustino Carosio.
Obtaining motive-power by electro-magnetism -	881	12th April 1853	Robert John Kaye. John Ormrod Openshaw.
Obtaining motive-power - - - -	1248	20th May 1853	Edward Jones Schollick.
Magneto-electric apparatus suitable for the production of motive-power &c.	1587	1st July 1853	Edward Clarence Shepard.
Electro-magnetic apparatus, which with its products is applicable to the production of motive-power.	1671	14th July 1853	Augustino Carosio.
Obtaining motive-power - - - -	1934	18th Aug. 1853	Jean Larmanjat.
Obtaining power by the aid of an electric current, for motive and telegraphic purposes.	2032	2nd Sept. 1853	Augustino Carosio.
Obtaining power by electro-magnetism - -	2498	28th Oct. 1853	John Walker Wilkins.
Electro-magnetic engines - - - -	2677	18th Nov. 1853	James Gall, junior.
Improved application of magneto-electricity for driving machinery, and for neutralizing the impulsive force of machinery in motion.	2764	26th Nov. 1853	Joseph Scipion Rousselot.
See also "VALVES, &c." For Governors—*see* "STEAM AND OTHER GOVERNORS, &c."			

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER MACHINES—*continued.*			
V.—Engines driven by Weights &c.; Transmitting Power; Converting Movements.			
Obtaining motive-power	761	30th March 1853	Louis Michel Lombard.
Method of obtaining motive-power	769	30th March 1853	Lot Faulkner.
Construction and arrangement of machines for the application of horse-power—"Palmer's improved horse-power."	865	11th April 1853	William Russell Palmer.
Obtaining and applying motive-power	961	21st April 1853	Juan Duran.
Obtaining differential movements	1329	30th May 1853	Julian Bernard.
Obtaining motive-power (*Communicated by Messrs. Guichene and Burgalat.*)	1540	24th June 1853	John Henry Johnson.
Obtaining motive-power; machinery or apparatus employed therein.	1596	4th July 1853	François Mathieu de Amezaga.
Transmitting power to agricultural implements	1810	3rd Aug. 1853	Thomas Atkins.
Transmitting power	1844	6th Aug. 1853	Peter Armand le Comte de Fontainemoreau.
Obtaining motive-power	1868	11th Aug. 1853	Thomas Dewsnup.
Means of converting reciprocating or rectilinear motion into rotatory motion	1950	20th Aug. 1853	William Schmollinger. Edward Grainger Smith.
Transmission of motive-power, being an improved substitute for the crank. (*Communicated by Jean Lassere and Edmond Heusschen.*)	2105	12th Sept. 1853	John Henry Johnson.
Machinery for obtaining motive-power	2112	12th Sept. 1853	Charles Cannon.
Obtaining power by mechanical means	2298	7th Oct. 1853	William James Matthias. Thomas Bailey.
Obtaining and applying motive-power	2509	31st Oct. 1853	Edward Gregson Banner.
Constructing and applying connecting-rods (*For transmitting power.*)	2975	22nd Dec. 1853	Peter Armand le Comte de Fontainemoreau.
Obtaining and applying motive-power	3042	31st Dec. 1853	Benjamin Hunt.
MUSICAL INSTRUMENTS AND APPENDAGES.			
Construction of the musical instrument designated the bassoon.	140	20th Jan. 1853	Cornelius Ward.
Combining the musical instruments designated the drum and the cymbals in such manner as to make them as one instrument—"The Cymbal Drum."	141	20th Jan. 1853	Cornelius Ward.
Metal musical wind-instruments—"Besson's system."	328	5th Feb. 1853	Auguste Edouard Loradoux Bellford.
An improved hopper for a pianoforte	548	4th March 1853	William Sandilands.
Pianofortes	569	7th March 1853	William Matthews.
Improvements in pianofortes	658	17th March 1853	John Talbot Ashenhurst.
Pianofortes, organs, seraphines, and other like musical instruments	709	23rd March 1853	Hesketh Hughes. William Thomas Denham.
Improvements in horizontal pianofortes	800	4th April 1853	George Henry Brockbank.
Certain improvements in pianofortes	1205	14th May 1853	Eugene Rolt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MUSICAL INSTRUMENTS, &c.—*continued.*			
Improvements in pianofortes	1337	31st May 1853	Hesketh Hughes. William Thomas Denham.
Improvements in concertinas	1559	28th June 1853	Carlo Minasi.
Improvement in pianofortes	1615	6th July 1853	Robert Anderson Rüst.
Method of and instrument for keeping time in music.	1698	16th July 1853	Edmund Reynolds Fayerman.
Depositing metals or alloys of metals (*Pianoforte strings and pins.*)	1777	29th July 1853	William Edward Newton.
Improvements in pianofortes	1912	16th Aug. 1853	James Stewart.
An improved pianoforte action for upright pianofortes.	2283	6th Oct. 1853	Joseph Henry Cary.
Stationary and portable organs with keys and cylinder.	2385	15th Oct. 1853	Antoine Corvi.
Pistons of certain valved wind-instruments	2397	17th Oct. 1853	John James Haite. William Leach.
Certain improvements in finger-keyed musical instruments.	2630	12th Nov. 1853	Constant Busson.
Construction of organs and free reed instruments	2634	14th Nov. 1853	Henry Willis.
Improvements in pianofortes	2981	22nd Dec. 1853	Joseph Shaw.
Friction joints or fastenings (*For music-stands.*)	3018	29th Dec. 1853	James White.
NAILS, BOLTS, AND RIVETS.			
Machinery for shaping metals (*For making rivets, bolts, &c.*)	82	12th Jan. 1853	John Arrowsmith.
Manufacture of bolts and rivets	308	4th Feb. 1853	Robert Griffiths.
Manufacturing screw-bolts, spikes, and rivets, and other similar articles; machinery or apparatus used for such manufacture.	698	22nd March 1853	Samuel McCormick.
Manufacture of dowels used in joinery	733	28th March 1853	George Oakes Asbury.
Nails and other fastenings; machinery or apparatus employed in the manufacture thereof.	819	5th April 1853	Thomas Carr.
Machinery or apparatus for the manufacture of nails	1116	6th May 1853	John Ryan Danks. Bernard Peard Walker.
Machinery for making rivets, spikes, &c.	1456	15th June 1853	John Elliott. John Brown.
Application and combination of glass, porcelain stoneware, earthenware, terra-cotta, composition in plaster of the kind called scagliola and majolica ware. (*Nail-heads.*)	1480	17th June 1853	James Hogg, junior.
Depositing metals or alloys of metals (*On nails.*)	1777	29th July 1853	William Edward Newton.
Manufacture of rivets and bolts	1796	1st Aug. 1853	Robert Griffiths.
Machiney or apparatus for manufacturing or forging iron or other metals into screw-bolts, rivets, pins, studs, or other similar articles.	2356	13th Oct. 1853	William Robinson.
Certain improvements in apparatus or machines for forging, drawing, moulding, or forming bolts and various other articles in metal.	2615	11th Nov. 1853	John Platt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
NAPHTHA, PARAFFINE, EUPION; BITUMINOUS AND RESINOUS OILS; TURPENTINE.			
Method of heating coal and bituminous substances; treatment of their volatile products. (*Obtaining eupion and paraffine.*)	92	13th Jan. 1853	William Brown.
Process of and apparatus for distilling certain vegetable and mineral matters, also animal bones and flesh. (*For obtaining essential oils and paraffine.*)	174	24th Jan. 1853	David Clovis Knab.
Treatment of certain bituminous mineral substances; obtaining products therefrom. (*Paraffine and paraffine oil.*)	307	4th Feb. 1853	John Perkins.
Apparatus for the distillation of resin oil; method of bleaching and deodorizing the same during the process of manufacture.	483	25th Feb. 1853	Frederick Goodell.
Manufacture of lubricating oil; mode of applying such oil to the purposes of lubrication. (*From coal tar.*)	677	18th March 1853	George Rose.
Applying to illuminating the extract of bituminous products of coal, peat, and lignites; rectifying and depurating the essences and greasy matter from coal. (*Essential coal-oil; naphthaline.*)	770	31st March 1853	William Augustus Pascal Aymard.
Preparing oils; apparatus for burning the same - (*Obtained by distillation.*)	974	22nd April 1853	Cyprien Marie Tessie du Motay.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids. (*For distilling resinous substances.*)	1363	3rd June 1853	Ferdinand Louis Gossart.
Apparatus for manufacturing resin oil -	1556	27th June 1853	Alfred Vincent Newton.
Treatment of certain oils - - - (*Mineral oils.*)	1601	5th July 1853	John Fall.
Means of treating and preparing certain tar or naphtha, and applying products thereof.	1748	25th July 1853	Warren de la Rue.
Manufacture of oils - - - - (*Eupion oils.*)	1897	13th Aug. 1853	John Perkins.
Distillation and purification of resin oil - -	1920	16th Aug. 1853	Alfred Vincent Newton.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Paraffine oil.*) (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Manufacture of certain mineral oils and paraffine -	1953	22nd Aug. 1853	Auguste Edouard Loradoux Bellford.
Mode of obtaining volatile products from bituminous coals and other bituminous substances.	1957	23rd Aug. 1853	William Brown.
Distillation of turpentine and other resinous substances and their products.	2144	15th Sept. 1853	Thomas William Keates.
Treatment of lignite or wood coal; obtaining various useful products therefrom.	2343	12th Oct. 1853	Edme Jules Maumené.
Carbonizing and distilling peat, coal, wood, and other animal, vegetable, and mineral substances. (*And obtaining oils.*)	2435	21st Oct. 1853	Jean François Felix Challeton.
Bath for heating ond distilling - - - (*Coal tar.*)	2535	2nd Nov. 1853	Frederick Alfred Gatty.
A liquid chemical compound for the production of artificial light. (*A compound of naphtha, &c.*)	2618	11th Nov. 1853	Abel Easton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
NAPHTHA, &c.—*continued.*			
Preparing solvents for india-rubber and gutta-percha; rendering waterproof fabrics free from odour.	2648	15th Nov. 1853	Joseph Fry.
Apparatus for subjecting substances to the action of heat, for subjecting such substances to the process of distillation.	2827	5th Dec. 1853	Edward Lavender.
Manufacture of liquid hydro-carbons and paraffine	2958	20th Dec. 1853	Paul Wagenmann.
Improvements in the treatment of naphthas and other volatile hydro-carbons, and in the application of the same.	2997	27th Dec. 1853	Frederick Crace Calvert.
NAUTICAL INSTRUMENTS, MARINERS' AND OTHER COMPASSES; ASTRONOMICAL CALENDAR.			
Suspending or applying mariners' compasses in vessels built of iron or partly of iron.	234	29th Jan. 1853	William Watson Hewitson.
Marine and surveying compasses	665	18th March 1853	Paul Cameron.
Manufacture of certain drawing or mathematical instruments, also packing or fitting the same in their cases;—also applicable to the packing or fitting of other articles (*Compasses.*)	1634	9th July 1853	James Parkes. Samuel Hickling Parkes.
Nautical and surveying instruments	1681	15th July 1853	George Gowland.
Manufacture of tablets and dial-plates applicable to compasses &c.	1788	1st Aug. 1853	John Smeeton.
Mariners' compasses	2107	12th Sept. 1853	John Lilley, junior.
Construction of astronomical calendar	2111	12th Sept. 1853	Louis Achille Brocot.
Construction of compasses (*Drawing compasses.*)	2256	3rd Oct. 1853	James Coleman.
NECK-TIES, STOCKS, NECKLACES, &c.			
Method of dressing lamb-skin leather and cleaning the wool therefrom (*For making stocks.*)	230	29th Jan. 1853	John Ryall Corry. James Barrett Corry.
Certain instruments, apparatus, and articles for the application of electro-galvanic and magnetic action for medical purposes. (*Necklaces, armatures, rings.*)	806	4th April 1853	Antoine Burq.
Improved construction of tie for neckcloths and neck-ribbons;—also applicable to neck-ribbons of caps and bonnets.	1973	24th Aug. 1853	Alfred Swonnell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
NEEDLES AND PINS; NEEDLE-CASES.			
Means for enclosing needles - - -	99	14th Jan. 1853	Arthur James.
Improvements in needles; manufacture of the same	973	22nd April 1853	William Beard.
Manufacture of envelopes for needles - -	1339	1st June 1853	Joseph Morris.
Manufacture of needles - - - - -	1357	2nd June 1853	Robert Smith Bartleet.
Manufacture of sewing-machine needles - -	1676	14th July 1853	Robert Smith Bartleet.
Needles or wires used in the manufacture of carpets, looped pile fabrics, and velvets - - -	2075	9th Sept. 1853	Edwin Lumby. Zacchæus Sugden.
Method of forming seams and ornamental stitching; machinery for effecting such operation.	2187	21st Sept. 1853	Alfred Vincent Newton.
Manufacture of metallic pins - - - (*A communication from the United States of America.*)	2749	25th Nov. 1853	John Henry Johnson.
Counting, measuring, and weighing needles; preparing papers to receive the same.	2860	9th Dec. 1853	Arthur James.
Machinery for manufacturing needles and fish-hooks.	2947	19th Dec. 1853	Henry Milward.
Sewing-machines - - - - -	2996	27th Dec. 1853	Edward Joseph Hughes.
NUMBERING AND COUNTING; PAGING BOOKS AND FACILITATING REFERENCE.			
Machinery or apparatus for printing on leaves of books their designations, numbers, or devices, or those of their pages;—may also be used to advantage for printing designating numbers or devices on various other articles.	514	1st March 1853	John M^c^Adams.
Machinery for numbering the pages of books and documents.	1675	11th Aug. 1853	Thomas Frederick Newell.
Method of indicating places, divisions, or contents in directories.	2452	24th Oct. 1853	Edward John Montagu Archdeacon.
Electric telegraphs - - - - - (*Numbering the wires.*)	2846	8th Dec. 1853	William Thomas Henley.
Counting, measuring, and weighing needles; preparing papers to receive the same.	2860	9th Dec. 1853	Arthur James.
NUT-CRACKERS.			
Nut-crackers - - - - - -	347	9th Feb. 1853	Isaiah James Machin.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OIL-CLOTHS, FLOOR-CLOTHS, FURNITURE-COVERS.			
Manufacturing and treating caoutchouc - - (*Printing to imitate oil-cloth.*)	22	5th Jan. 1853	Gustave Eugène Michel Gérard.
Ornamenting surfaces or fabrics applicable to various useful purposes, such as for covers for furniture, imitation tapestry, carpets or hangings.	857	9th April 1853	Herbert Taylor.
Treating fabrics suitable for floor-cloths, covers, and such like articles.	1414	9th June 1853	William Brookes.
Method of forming designs and patterns upon papier mâché, japanned iron, glass, metal, and other surfaces. (*As oil-cloth.*)	1714	19th July 1853	Charles Breese.
Machinery for printing textile fabrics, oil-cloths, and other similar fabrics, or materials.	1986	18th Aug. 1853	William Curtain.
OILING; COMPOUNDS FOR OILING; OIL-CANS.			
Manufacture of oils; treatment thereof for lubricating purposes.	8	1st Jan. 1853	John Henry Johnson.
Method of lubricating revolving shafts and their bearings or pedestals.	79	12th Jan. 1853	John Hick.
Method of heating coal and bituminous substances; treatment of their volatile products. (*Obtaining lubricating oil.*)	92	13th Jan. 1853	William Brown.
Method of lubricating machinery; mechanism or apparatus employed therein.	200	26th Jan. 1853	John Henry Johnson.
Method of preparing and spinning cotton-wool, flax, and other fibrous substances; machinery or apparatus employed therein. (*Oiling wool.*)	255	31st Jan. 1853	Edmund Leach.
Composition of matter termed "Metallic oil" to be used for lubricating the axles of wheels and the rubbing or working parts of steam-engines, and every description of machinery and apparatus for softening hemp and other fibrous substances preparatory to spinning the same, and for other purposes.	279	2nd Feb. 1853	Auguste Edouard Loradoux Bellford.
Lubricating-mechanism - - - - -	344	9th Feb. 1853	John Little.
Spinning, roving, doubling, and twisting cotton, worsted, flax, and other fibrous materials - (*Lubricating the bearing parts of flyers.*)	605	9th March 1853	George Collier. Samuel Thornton.
Dressing, sizing, and tape machines - - (*Lubricating yarn.*)	641	14th March 1853	William Bashall, junior.
Preparing lubricating matters - - -	656	16th March 1853	Edward Nickels.
Manufacture of lubricating oil; mode of applying such oil to the purposes of lubrication.	677	18th March 1853	George Ross.
Treating certain oily matters; manufacture of oil -	776	1st April 1853	George Fergusson Wilson.
Manufacture of cloths; preparation of wool - (*Oiling.*)	783	1st April 1853	George Fergusson Wilson.
Manufacture of metallic casks and vessels - (*Also oil-cans.*)	903	14th April 1853	William Laycock.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OILING, &c.—*continued.*			
Apparatus for winding, cleaning, doubling, twisting, and spinning silk, cotton-wool, flax, hemp, and other filamentous materials. (*Placing spindle ends in oil-cups.*)	915	14th April 1853	Jean Baptiste Maniquet.
Improvements in cocks - - - - (*Lubricating.*)	928	16th April 1853	Henry Wilks.
Machinery for combing wool or other fibrous materials. (*Lubricating combs.*)	983	23rd April 1853	William Johnson.
Machinery for preparing and spinning cotton and other fibrous substances. (*Saving lubricating liquid.*)	1005	27th April 1853	William Johnson.
Lubricating materials - - - -	1064	2nd May 1853	François Monfrant.
Manufacture of grease or composition for lubricating the axles and moving parts of machinery.	1207	16th May 1853	Jean Emile Barse.
Mechanism of a new construction, having as its end the prevention of the loss of force caused till now by friction, to diminish the oiling till now necessary, and to prevent the heating of the axletrees in revolving.	1372	4th June 1853	Carl Fedor Lenz.
Manufacture of greases and oils - - -	1373	4th June 1853	William Bradburn.
Preparation for lubricating machinery - -	1508	20th June 1853	Charles Louis Defever.
Treatment of certain oils - - - -	1601	5th July 1853	John Fall.
Manufacture of lubricating matters - -	1678	14th July 1853	William Little.
Means of treating and preparing certain tar or naphtha and applying products thereof. (*For lubricating.*)	1748	25th July 1853	Warren de la Rue.
Manufacture of oils - - - -	1897	13th Aug. 1853	John Perkins.
Axle-box for railway carriages and waggons -	1952	22nd Aug. 1853	John Steven.
Manufacture of certain mineral oils and paraffine -	1953	22nd Aug. 1853	Auguste Edouard Loradoux Bellford.
Improvements in lubricators - - -	1975	24th Aug. 1853	Charles Collyford Banks.
Machinery for spinning cotton or other fibrous substances. (*Oiling shafts.*)	2050	6th Sept. 1853	John Kerfoot.
Cans or vessels used for applying oil or other lubricating material to machinery.	2067	8th Sept. 1853	John Petrie, junior.
Lubricating shafts or revolving metallic surfaces -	2158	16th Sept. 1853	Andrew Barclay.
Treating wool and fabrics composed of wool - (*Oiling.*)	2316	10th Oct. 1853	George Fergusson Wilson.
Mills for grinding - - - - (*Oiling the bearings.*) (*Communicated by Messrs. Fromont and Son.*)	2447	22nd Oct. 1853	John Henry Johnson.
Utilizing the saponaceous matters contained in the waste waters of woollen and other manufactories - - - - -	2519	31st Oct. 1853	Celestin Pechoin. Eugène Pechoin Barades.
Combining oil with other liquids for the obtainment of a new lubricating compound.	2542	2nd Nov. 1853	Benjamin Butterworth.
Improved gelatinous or glutinous compounds for lubricating railway and other machinery.	2570	5th Nov. 1853	John Banks Nicklin.
Bleaching oils and fats - - - - (*For lubricating.*)	2715	22nd Nov. 1853	Frederick Meyer.
Railway wheels, axles, and boxes - - -	2845	8th Dec. 1853	William Bridges Adams.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OILING, &c.—*continued.*			
Improvements in steam-engines - - - (*Oiling the crank-pin bearing.*)	2872	9th Dec. 1853	John Bourne.
Certain improvements in fire-arms; bullets and waddings to be used therewith. (*Placing grease in bullets.*)	2921	16th Dec. 1853	William Tranter.
Compositions to be employed as substitutes for caoutchouc, gutta-percha, and certain fatty bodies. (*As lubricating compounds.*)	3045	31st Dec. 1853	Stanislas Tranquile Modeste Sorel.
OILS.			
Manufacture of oils; treatment thereof for lubricating purposes.	8	1st Jan. 1853	John Henry Johnson.
Treating oils and other fatty matters - -	360	10th Feb. 1853	George Hutchinson.
Deodorizing cod liver oil; rendering it more agreeable and easier to use, either by itself or mixed, so as to be capable of being adminstered in larger quantities and with greater success.	365	11th Feb. 1853	Sir James Murray, Knt.
Treatment of certain saponaceous compounds obtained in the manufacture of soap - - (*Obtaining oil.*)	1027	27th April 1853	Alfred George Anderson. John Barker Anderson.
Treatment of oil - - - - - -	1270	23rd May 1853	Paul Hannuic. Gustave Collasson.
Mode of making with iodine and its compounds, in combination with substances containing extractive principles, various elementary combinations. (*Iodhydrated oils.*)	1487	18th June 1853	Jacques François Dupont de Bussac.
Preparation of a black powder from coal; application thereof to the manufacture of paints, blacking, and various other purposes. (*Applicable for refining oils.*)	1900	13th Aug. 1853	John Gwynne.
Manufacture of soap - - - - -	2318	10th Oct. 1853	George Fergusson Wilson.
Preparing rape-seed oil - - - - (*Refining.*)	2433	21st Oct. 1853	James Warburton.
Bleaching oils and fats - - - -	2715	22nd Nov. 1853	Frederick Meyer.
Extracting and treating the juice of beetroot and other vegetables. (*And oils from oleaginous matters.*)	2855	8th Dec. 1853	Philippe Joseph Toussaint Bordone.
Presses for expressing oil or other fluids from fruits, grains, or other substances.	2951	19th Dec. 1853	Auguste Edouard Loradoux Bellford.
Improvements in acting on drying-oils; preparing varnishes.	2961	20th Dec. 1853	John Webster.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Optical Instruments (*Telescopes, Stereoscopes, Lenses, Opera and Reading Glasses, Spectacles*).			
Optical and mathematical instruments	195	26th Jan. 1853	Issac Davis.
Apparatus for transmitting and reflecting light (*Lenses.*)	457	23rd Feb. 1853	Edouard Albrecht.
Improvements in stereoscopes	711	23rd March 1853	Antoine François Jean Claudet.
Spectacle and reading glasses and pebbles	1686	15th July 1853	Henry Nathan. Solomon Elsner.
Improvements in stereoscopes	2510	31st Oct. 1853	Christian Göethel. Charles Morits Zimmerman.
Machinery for the manufacture of optical lenses	2608	11th Nov. 1853	Salomon Sturm.
Telescopes and other glasses in their application to the measurement of distances. (*And opera-glasses.*)	2848	8th Dec. 1853	Benjamin Solomons.
Friction-joints or fastenings (*For telescope tubes.*)	3018	29th Dec. 1853	James White.
Ovens and Kilns.			
Manufacture of sulphuric acid and copper from copper ores, reguluses, and matts.	57	8th Jan. 1853	William Henderson.
Improvements in ovens	84	10th Jan. 1853	Michael Fitch.
Manufacture of bricks and tiles	278	2nd Feb. 1853	William Gregory.
System of cooking more economic, speedy, convenient, and in every respect superior to any now in use, called "Green's economical self-basting cooking-apparatus."	463	24th Feb. 1853	John Green.
Cooking-apparatus	573	7th March 1853	John Little.
Treatment or manufacture of animal charcoal (*Arranging the kilns or ovens.*)	639	14th March 1853	John Scott.
Construction of annealing kilns employed in the manufacture of glass.	659	17th March 1853	William Blinkhorn.
Improvements in earthenware kilns	868	11th April 1853	William Muir Campbell.
Manufacture of paste and enamel buttons	899	14th April 1853	Constant Jouffroy Duméry.
Construction of coke ovens	923	16th April 1853	Joseph Dunning.
Application of retorts in gas ovens or other ovens, and of gas ovens or other ovens which are constructed as retorts, to the process of improving iron and converting iron into steel.	929	18th April 1853	William Walker Stephens.
Charring peat and other vegetable substances; burning lime. (*Kiln.*)	1229	18th May 1853	John Barsham.
Construction of oven	1286	25th May 1853	Jonathan Dodgson Carr. John Carr.
Improved stove or kiln	1477	17th June 1853	Auguste Edouard Loradoux Bellford.
Construction of apparatus for re-burning animal charcoal.	1668	13th July 1853	Alfred Fryer.
Kilns for baking or burning clay	1749	25th July 1853	John Ferguson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OVENS, &c.—*continued.*			
Apparatus for consuming smoke	1790	1st Aug. 1853	John Gray.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Kitchen-ranges and cooking-apparatus	2000	29th Aug. 1853	Joseph Cundy.
Kilns for baking and burning articles in earthenware (*As bricks and pipes.*)	2159	16th Sept. 1853	Alexander Thomson. David Lockerbie.
Ovens and apparatus for baking	2246	1st Oct. 1853	Thomas Hendry.
Earthenware kilns	2332	11th Oct. 1853	William Muir Campbell.
Potters' or earthenware kilns	2353	13th Oct. 1853	William Muir Campbell.
Construction of ovens and kilns	2367	14th Oct. 1853	William Ridgway.
Construction of ovens and furnaces (*Annealing ovens.*)	2521	1st Nov. 1853	John Crowley.
Improvements in coke ovens	2599	9th Nov. 1853	John Brown.
Ventilating sewers, mines, or other subterranean works. (*Coke ovens.*)	2814	3rd Dec. 1853	Abraham Rogers.
Disinfecting sewers or other drains or depositories of fetid matters or gases, and converting the contents thereof to useful purposes. (*Kiln for carbonizing peat.*)	2876	10th Dec. 1853	Allan Macpherson.
An improved cooking-apparatus (*Oven.*)	2954	20th Dec. 1853	Adam Paterson.
OXYDIZING; PREVENTING OXYDATION; REMOVING INCRUSTATION.			
Apparatus for generating steam or other elastic fluid. (*Removing incrustation from boilers.*)	735	28th March 1853	David Stephens Brown.
Printing or producing colours on textile fabrics (*Oxydizing.*)	823	6th April 1853	Frederick Albert Gatty.
Manufacture of white oxyde of zinc	998	26th April 1853	George Kennedy.
Manufacture of alkali from common salt (*Oxydizing "black ash" liquids.*)	1232	18th May 1853	William Gossage.
Preventing incrustation of steam-boilers	1321	28th May 1853	Edward Duclos de Boussois.
Metallic pens and penholders	1706	18th July 1853	Isaie Alexandre.
Means or processes for preserving metals from corrosion.	1789	1st Aug. 1853	John Carvalho de Medeiros.
Treatment or manufacture of gutta-percha, and application thereof. (*For preserving metal from oxydation.*) (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Printing or producing colours on textile fabrics (*Oxydizing steam colours.*)	2440	21st Oct. 1853	Frederick Albert Gatty.
Feed-plates to be used for oxydizing lead and refining silver and lead.	2736	24th Nov. 1853	Evan Matthew Richards.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PACKING AND ARRANGING.			
A self-acting cam-press	315	4th Feb. 1853	Alfred Woodward.
Machine for weighing or measuring and packing spices, drugs, coffee, and like matters.	669	18th March 1853	Richard Archibald Brooman.
Packing yarn and other materials	950	20th April 1853	John Smethurst.
Construction of fire-arms (*Packing cartridges in the butt end of the stock.*)	1499	20th June 1853	Charles Crickmay.
Manufacture of certain drawing or mathematical instruments; packing or fitting the same in their cases;—also applicable to the packing or fitting of other articles	1634	9th July 1853	James Parkes. Samuel Hickling Parkes.
Packing goods so as to increase the facility and safety of their transmission from place to place.	1674	14th July 1853	André Louis Jules le Chevalier St. André.
Construction of presses	1822	4th Aug. 1853	George Armitage.
Machinery for the manufacture and packing of bread or biscuits.	2223	28th Sept. 1853	William Hickson.
Machinery or apparatus for pressing goods, applicable also to raising or removing heavy bodies.	2390	17th Oct. 1853	John Macmillan Dunlop.
Machinery to save persons and property in case of fire, also applicable for raising and lowering weights of any kind, also for compression and other useful purposes	2813	3rd Dec. 1853	Charles Edmund Green. John Baylias.
PAINTING; VARNISHING; BURNING IN COLOURS.			
Application of porcelain and similar materials to ornamenting purposes. (*Coating iron, wood, or plaster with varnishes.*)	637	14th March 1853	John Henry Johnson.
Ornamenting surfaces or fabrics applicable to various useful purposes, such as for covers of furniture, imitation tapestry, carpets or hangings.	857	9th April 1853	Herbert Taylor.
Manufacture of porcelain and like wares (*Painting, and burning in the colours.*)	1004	26th April 1853	Moses Poole.
Treating fabrics suitable for floor-cloths, covers, and such like articles.	1414	9th June 1853	William Brookes.
Apparatus for applying paint, varnish, and other liquid substances &c.	2344	12th Oct. 1853	Robert William Waithman.
Treatment or manufacture of gutta-percha, and application thereof. (*For varnishing glass or metal.*) (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Colouring photographic pictures	2552	3rd Nov. 1853	Bryan Edward Duppa.
Combining gelatine with certain other substances and colouring the same, so as to produce various objects capable of resisting atmospheric influences.	2762	26th Nov. 1853	Louis Cornides.
Mode of treating photographic pictures (*Colouring.*)	2856	8th Dec. 1853	Marcel Gustave Laverdet.
Mode of coating metals, wood, stone, and plaster, to preserve them from decay. (*Varnishing.*)	2864	9th Dec. 1853	John Winspear.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAINTING, &c.—*continued.*			
Ornamenting or producing pictures on japanned goods, panels, canvas, or other material whereby a vast amount of artistic skill and labour is superseded. (*Painting and printing.*)	2870	9th Dec. 1853	Gideon Morley.
Certain tablets, labels, and signs, or their surfaces, exhibiting letters and designs. (*Coating with paint or cement.*)	2913	15th Dec. 1853	Frederick William Branston.
Manufacture of imitation leather - - (*Colouring.*)	2968	21st Dec. 1853	Heiman Kohnstamm.
System of painting by means of lithography, without leaving a particle of paper upon the canvas.	2974	22nd Dec. 1853	Louis Adolphe Ferdinand Besnard.
PAINTS, COLOURS, AND VARNISHES.			
Apparatus for refrigerating - - - (*Precipitating colours.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Process of and apparatus for distilling certain vegetable and mineral matters, also animal bones and flesh. (*For obtaining bone black.*)	174	24th Jan. 1853	David Clovis Knab.
Colouring matter for coating or covering the exterior or interior of buildings, some of the ingredients of which such colouring matter is composed being capable of conversion into size, paste, and ground-colour, for priming or giving the first coat or covering to work intended to be covered with oil paint.	292	3rd Feb. 1853	John Heckethorn.
Manufacture of knobs for doors and other like uses; —partly applicable to the manufacture of certain articles of earthenware - - - (*Artists' colour-pans.*)	320	5th Feb. 1853	John Whitehouse, senior. John Whitehouse, junior.
Manufacture of colours and paints - -	387	14th Feb. 1853	William Clark.
Manufacture of oxyde of zinc or zinc white; apparatus for that purpose.	433	19th Feb. 1853	Charles Cowper.
Apparatus for distillation of resin oil and for an improved method of bleaching and deodorizing the same during the process of manufacture. (*Obtaining paints and varnishes.*)	483	25th Feb. 1853	Frederick Goodell.
Apparatus for producing and applying current electricity; partly applicable for obtaining and treating certain chemical products resulting from electrolytic action. (*Obtaining oxydes suitable for pigments.*)	634	14th March 1853	William Edwards Staite.
Manufacture of a red pigment commonly called Venetian red.	655	16th March 1853	John Oliver.
Manufacture of certain salts and oxydes of metals - (*Oxyde of zinc.*)	741	28th March 1853	George Edward Dering.
Manufacture of white oxide of zinc - -	998	26th April 1853	George Kennedy Geyelin.
Lubricating materials - - - (*Compound for paints.*)	1064	2nd May 1853	François Monfrant.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAINTS, &c.—*continued.*			
Composition for coating and preventing the decay of exposed surfaces. (*Applicable as a paint.*)	1092	4th May 1853	James Edgar Cook.
Obtaining liquid cement and pigments or paints -	1169	11th May 1853	George Bell.
Manufacturing chlorine; obtaining certain salts and other useful products from the residual matters of such manufacture.	1319	28th May 1853	Christopher Rinks.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids. (*For manufacture of bone black.*)	1363	3rd June 1853	Ferdinand Louis Gossart.
Manufacture of white lead - - -	1386	6th June 1853	George Carter. George Marriott.
Improvements in dryers; preparing drying-oils for oil-paints, varnishes, and other uses.	1425	11th June 1853	Christopher Binks.
Manufacture of certain salts of magnesia and a red colouring matter.	1441	14th June 1853	Thomas Richardson.
Manufacture of paints, pigments, and materials for house painting, paper-staining, and decorative purposes generally.	1667	13th July 1853	Arnold Morton.
Means of treating and preparing certain tar or naphtha, and applying products thereof. (*For making varnish.*)	1748	25th July 1853	Warren de la Rue.
Obtaining iodide of potassium when heating certain metals. (*And per-iodide of mercury.*)	1759	26th July 1853	Farnham Maxwell Lyte.
Depositing metals or alloys of metals - - (*As a substitute for paints.*)	1777	29th July 1853	William Edward Newton.
Preparation or composition to be applied to pigments for the purpose of the facilitating the drying of the same.	1864	10th Aug. 1859	William Edward Newton.
Preparation of a black powder from coal; application thereof to the manufacture of paints and various other purposes.	1900	13th Aug. 1853	John Gwynne.
Manufacture or treatment of gutta percha; application thereof. (*As a varnish.*) (*Communicated by Louis François Alexandre Deseille.*)	1904	13th Aug. 1853	John Henry Johnson.
Distillation and purification of resin oil - - (*The residue forms a base for black paint.*)	1920	16th Aug. 1853	Alfred Vincent Newton.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Making paints.*) (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Treatment of lignite or wood-coal; obtaining various useful products therefrom.	2343	12th Oct. 1853	Edme Jules Maumené.
Manufacture of zinc white - - - (*Communicated by Louis Pierre Geslin.*)	2401	18th Oct. 1853	Alphonse Doste Noel.
Treatment or manufacture of gutta-percha, and application thereof. (*For varnish.*) (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Mode of preparing the colour known as artificial ultramarine.	2670	17th Nov. 1853	Augustus Johann Hoffstaedt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAINTS, &c.—*continued.*			
Feed-plates to be used for oxydizing lead and refining silver and lead.	2736	24th Nov. 1853	Evan Matthew Richards.
Preparation of paints for buildings and other uses -	2752	25th Nov. 1853	Charles Calixte André Grenier.
Belts or bands for driving machinery, for use in mines and for other purposes. (*Compounds for varnishing.*)	2936	16th Dec. 1853	Robert William Waithman.
Improvements in acting on drying-oils, preparing varnishes.	2961	20th Dec. 1853	John Webster.
Manufacturing liquid quartz, or silex to be used in the manufacture of certain compositions for ornamental and useful purposes. (*Used as varnish.*)	2991	24th Dec. 1853	Harris Hardinge.
PAPER, PASTEBOARD, AND PAPIER-MÂCHÉ.			
I.—Making; Preparing Rags, Pulp, &c.			
Manufacturing paper - - - -	393	15th Feb. 1853	George Stiff.
An improved rag tearing and separating machine -	730	26th March 1853	Richard Archibald Brooman.
Manufacture of safety paper - - -	829	6th April 1853	William Johnson.
Machinery for obtaining wool, silk, and fibres from fabrics, and rendering them suitable to be again employed.	941	19th April 1853	Lambert Adolphe Beauvais.
Manufacture of paper - - - -	1181	13th May 1853	George Bertram.
Plastic compound applicable to various ornamental and useful purposes. (*Substitute for pasteboard; making paper impermeable to prevent erasures.*)	1260	21st May 1853	Henri Joseph Scoutetten.
Manufacture of paper - - - -	1413	9th June 1853	Edward Maniere.
Manufacture of paper - - - -	1422	10th June 1853	Richard Archibald Brooman.
Manufacture of paper and pasteboard &c. by the application of a material not hitherto used in Great Britain for such purposes. (*Stipa tenacissima.*)	1452	15th June 1853	Jules Dehau.
Manufacture of cards or substitutes for cards for the jacquard-loom.	1515	21st June 1853	Charles Cowper.
Manufacture of paper - - -	1743	25th July 1853	James Collins.
Manufacture of a composition resembling papier-mâché and carton-pierre, applicable to the same purposes to which papier-mâché and carton-pierre are applied;—partly applicable to the construction of ships and boats, and roofing.	1804	2nd Aug. 1853	William Henry Clarke.
Manufacture of paper from peat - - -	1828	5th Aug. 1853	Joseph Lallemand.
Compounds which may be employed for mouldings, frames, and many purposes to which papier-mâché and other like substances are applicable.	1885	12th Aug. 1853	Richard Archibald Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAPER, &c.—*continued.*			
Machinery for reducing wood and other vegetable fibres to pulp, applicable to the manufacture of paper, pasteboard, millboard, papier-mâché, mouldings, and other like purposes.	1911	15th Aug. 1853	Richard Archibald Brooman.
Disintegrating and pulping vegetable substances -	1942	19th Aug. 1853	Charles Watt. Hugh Burgess.
Manufacture of paper and pasteboard - -	1986	27th Aug. 1853	Alexander Louis Bargano.
Manufacture of materials to render them suitable as substitutes for millboard and such like uses.	2083	9th Sept. 1853	James Childs.
Application of the fibrous part of the palm tree and leaf to arts and manufactures.	2089	10th Sept. 1853	Arthur Warner.
Manufacture of pulp - - - - -	2133	14th Sept. 1853	Charles Townsend Hook.
Materials to be employed in the manufacture of textile fabrics and for other purposes. (*Fibres of mallows.*)	2213	26th Sept. 1853	Francis Frederick Closmann.
Manufacture of pulp for paper-makers - -	2219	28th Sept. 1853	Moses Poole.
Machinery for cutting rags, rope, fibrous and other substances - - - - - -	2460	25th Oct. 1853	Alfred Curtis. Bryan Donkin.
Machinery used for the manufacture of paper and papier-mâché - - - - - -	2588	7th Nov. 1853	John Onions. Samuel Bromhead.
Manufacture of paper - - - -	2628	12th Nov. 1853	Thomas De la Rue.
Manufacture of paper and pasteboard - - (*From leaves of trees.*)	2909	15th Dec. 1853	Jacques Pierre Henri Vivien.
II.—Cutting, Punching, Ornamenting; Producing Devices &c.			
Application of granite and similar substances to ornamenting purposes and to the construction of buildings. (*Applying pulverized granite to paper-hangings.*)	333	7th Feb. 1853	John Londe Tabberner.
Ornamenting paper-mâché and other surfaces with gold.	361	10th Feb. 1853	Charles Breese.
Producing ornamental surfaces on paper and other substances.	469	24th Feb. 1853	Thomas De la Rue.
Machinery or apparatus for cutting paper and other substances.	593	9th March 1853	James Hogg, junior.
Manufacture of woven, textile, or other fabrics; machinery or apparatus connected therewith. (*Producing ornamental designs on paper.*)	817	5th April 1853	William Pidding.
Paper and cardboard cutting machines - -	833	7th April 1853	William Morgan.
Machinery for perforating or punching paper, card, and other materials.	1350	2nd June 1853	Joseph Whitworth.
Means of obtaining marks and designs in paper -	1362	3rd June 1853	Jean Durandeau, junior.
Producing railway and other tickets and cards -	1485	18th June 1853	Guy Hannington.
Mode of ornamenting stuffs and paper - -	1492	18th June 1853	William Armand Gilbee.
Colouring paper on the surface - - -	1500	20th June 1853	John Paul.
Machinery or apparatus for cutting paper and similar materials. (*Communicated by Monsieur Pfeiffer.*)	1542	24th June 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAPER, &c. *continued.*			
Method of forming designs and patterns upon papier mâché and other surfaces.	1714	19th July 1853	Charles Breese.
Machinery for reducing wood and other vegetable fibres to pulp applicable to the manufacture of mouldings and other like purposes.	1911	15th Aug. 1853	Richard Archibald Brooman.
Machinery or apparatus for cutting paper (*Communicated by Monsieur Porier.*)	2222	28th Sept. 1853	John Henry Johnson.
Construction of printing-press	2463	25th Oct. 1853	Alfred Vincent Newton.
Mode of preparing sheets of paper suitable for postal communication. (*Stamping out lappets.*)	2821	5th Dec. 1853	Benjamin Skillman.
Treating or preparing paper	2834	6th Dec. 1853	William Edward Gaine.
Machines used for cutting paper	2946	17th Dec. 1853	Robert Whewell.
Machinery or apparatus for cutting paper and similar materials.	2986	23rd Dec. 1853	Jean Daniel Pfeiffer.
For Ruling Paper—*see* "RULING."			
PAVING; ROAD MAKING AND CLEANING; MOSAIC AND OTHER PAVEMENTS.			
Making a tessellated pavement	3	1st Jan. 1853	John Addison. Henry S. Eicke.
Paving roads and streets	186	25th Jan. 1853	Freeman Roe.
Construction and formation of granite and stone pavements and surfaces for carriage and railways.	267	31st Jan. 1853	Charles Hadley.
Giving elasticity to certain structures and parts thereof. (*Roads.*)	270	1st Feb. 1853	Thomas Charles Clarkson.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*Covering pavements and footways on wooden bridges.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
Paving and covering places	567	7th March 1853	Jacques François Dupont de Bussac.
Roads or ways, pavements and footpaths generally	610	10th March 1853	Thomas Butler Dodgson.
Making roads and ways	613	10th March 1853	François Frederic Dumarchey.
Producing ornamental glass surfaces (*Mosaic pavements.*)	858	9th April 1853	Adolphe Marius Alexandre Iglesia.
Roads, floors, footways, and other like surfaces	1034	28th April 1853	Sir John Scott Lillie.
Treatment and preparation of certain natural or artificial stones, applicable to various useful and ornamental purposes.	1087	4th May 1853	Charles Videgrain.
Treating waste products obtained in smelting and otherwise heating ores and minerals; producing a valuable product or products therefrom	1122	6th May 1853	William Longmaid. John Longmaid.
Improvements in paving and generally in covering surfaces with asphaltic and other similar materials.	1265	23rd May 1853	Adolphe Augustin Girouard.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAVING, &c.—*continued.*			
Method of pavement tending to secure the evenness of the road and proper adhesion to the foot.	1463	16th June 1853	James William Gibson.
Combination of glass with iron or other metals to serve for the construction of translucent pavements &c., and for any purpose for which a translucent medium possessing great strength is desirable.	1840	6th Aug. 1853	Auguste Edouard Loradoux Bellford.
Application of the slags or refuse matters obtained during the manufacture of metals.	1995	27th Aug. 1853	George Robinson.
Application of sulphate of lime to the fabrication of mosaics and incrustations, and for any new processes of colouration of certain varieties of this substance.	2030	2nd Sept. 1853	Barthélemy Auric.
Apparatus for cleaning road-ways &c.	2344	12th Oct. 1853	Robert William Waithman.
Utilizing the saponaceous matters contained in the waste waters of woollen and other manufactories - - - - - - - (*A composition for covering roads.*)	2519	31st Oct. 1853	Celestin Pechoin. Eugène Pechoin Barades.
Construction of roads, ways, and ducts - -	2976	22nd Dec. 1853	William Henry Woodhouse.
PENS, PENCILS, HOLDERS AND CASES.			
An invention for the purposes of writing and drawing, called the "Writing and Drawing Tube."	105	15th Jan. 1853	Edward Tasker.
Construction of pencil-cases - - -	277	1st Feb. 1853	William Levesley.
New or improved metallic pen - - -	544	4th March 1853	John Hinks. George Wells.
An improvement or improvements in certain kinds of boxes - - - - - - (*Metallic pen-boxes.*)	896	13th April 1853	John Hinks. George Wells.
Manufacture of certain drawing or mathematical instruments; also packing or fitting the same in their cases,—also applicable to the packing or fitting of other articles - - (*Pens.*)	1634	9th July 1853	James Parkes. Samuel Hickling Parkes.
Manufacture of pens, pencils, and instruments used when writing, marking, and drawing.	1693	15th July 1853	Charles Goodyear.
Metallic pens and penholders - - -	1706	18th July 1853	Isaie Alexandre.
Treating or preparing black lead - - -	1772	28th July 1853	Benjamin Collins Brodie junior.
Pens and penholders - - - -	1856	10th Aug. 1853	Henry Peters.
Mode of manufacturing steel or other metallic pens	1941	19th Aug. 1853	Alfred Lutwyche.
Combining india-rubber with other matters for writing, marking, and drawing. (*Making pencils.*)	2007	30th Aug. 1853	Charles Goodyear.
Machinery to be used in the manufacture of metallic pens and penholders - - -	2028	2nd Sept. 1853	John Hinks. George Wells. Frederick Dowler.
Improvements in penholders - - -	2054	6th Sept. 1853	Alfred Sommerville. Charles Twigg.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PENS, &c.—*continued.*			
Metallic pens and penholders	2055	7th Sept. 1853	Isaac Smith. Alfred Sommerville.
Writing instruments	2411	19th Oct. 1853	Robert Shaw.
Improvements applicable to pens and pencils for writing or drawing.	2750	25th Nov. 1853	Auguste Edouard Loradoux Bellford.
PHOTOGRAPHY; DAGUERREOTYPE; COLOURING PHOTOGRAPHS.			
Production of crayon effects by the daguerreotype and photographic processes.	193	25th Jan. 1853	John Edwin Mayall.
Plastic compound applicable to various ornamental and useful purposes. (*Preparing paper for photography.*)	1260	21st May 1853	Henri Joseph Scoutetten.
Improvements in photography	1629	8th July 1853	Jacob Brett.
Colouring photographic pictures	2552	3rd Nov. 1853	Bryan Edward Duppa.
Mode of treating photographic pictures	2856	8th Dec. 1853	Marcel Gustave Laverdet.
PILE-DRIVING; HYDRAULIC RAMS.			
Steam-machinery used for driving piles &c.	102	14th Jan. 1853	Frederick Joseph Bramwell. Isham Baggs.
Improvements in and applicable to certain descriptions of engines for driving piles.	295	3rd Feb. 1853	John Bower.
Apparatus for driving piles &c.	1843	6th Aug. 1853	Robert Morrison.
Obtaining and applying motive-power	2477	26th Oct. 1853	Freiderich Ludewig Hahn Danchell. William Startin.
Improvements in pistons and piston-rods of steam-hammers and pile-drivers, and in the parts in immediate connection therewith.	2500	29th Oct. 1853	James Nasmyth.
PIPES, TUBES, AND SYPHONS; LAYING PIPES.			
Manufacturing and treating caoutchouc (*Making tubes.*)	22	5th Jan. 1853	Gustave Eugène Michel Gérard.
A new composition of different metals or metallic substances. (*For making tubes.*)	35	6th Jan. 1853	Edme Augustin Chameroy.
Manufacture and treament of leather, either alone or in combination with other materials. (*For making hose.*)	36	6th Jan. 1853	Robert Whinery.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PIPES, &c. —*continued.*			
Manufacturing pipes, tiles &c. by means of a machine and arrangements of machinery titled "a central, circular, and horizontal motion."	94	13th Jan. 1853	Edward Wills Uren.
Manufacture of tubes; application of tubes to certain purposes - - - - - -	110	17th Jan. 1853	Thomas Potts. James Septimus Cockings.
Diving-bells and apparatus to be used in connection therewith. (*Moveable coffer-dam for laying pipes under water.*)	231	29th Jan. 1853	Richard Archibald Brooman.
Manufacture of knobs for doors and other like uses;—partly applicable to the manufacture of certain articles of earthenware - - - (*Pipes.*)	320	5th Feb. 1853	John Whitehouse, senior. John Whitehouse, junior.
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*Pipes.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
Manufacture of sewer and other pipes - -	396	15th Feb. 1853	William Blissett Whitton. George Samuel Whitton.
Construction of drain-pipes - - -	403	16th Feb. 1853	George Gray Mackay.
Improvements applicable to steam-pipes used for for warming, drying, or ventilating.	437	21st Feb. 1853	Wright Jones.
Manufacture of bricks, tiles, and drain pipes or tubes - - - - - -	450	22nd Feb. 1853	James Hudson. Thomas Bamford Hudson
Manufacture of pipes of earthenware, clay, or other similar materials.	488	26th Feb. 1853	Mark Henry Blanchard.
Machinery for making pipes and tubes - -	560	5th March 1853	Richard Archibald Brooman.
Rolling and shaping malleable metals - - (*Applicable for making tubes.*)	701	22nd March 1853	William Johnson.
Manufacture of tubes and mandrils - -	718	24th March 1853	William Keates.
Improvements in flushing-apparatus and in water-closets. (*Syphon.*)	904	14th April 1853	Joseph Adamson.
Constructing and applying models or patterns for moulding preparatory to casting iron, brass, and other metals for various purposes - - (*As pipes.*)	1010	27th April 1853	John Hetherington. John Dugdale. Edward Dugdale.
Mode of constructing dwelling-houses or other buildings; peculiar shaped bricks and tiles to be used for the purpose. (*And for making rain-spouts.*)	1134	9th May 1853	Edward Blackett Beaumont.
Moulding or shaping metals - - -	1136	9th May 1853	David Law. John Inglis.
Moulding and casting iron pipes - - -	1143	10th May 1853	John Clapham. Thomas Clapham. William Clapham.
Manufacture of pipes, tiles &c. from clay - -	1167	11th May 1853	Edmund Whitaker.
Plastic compound applicable to various ornamental and useful purposes. (*For pipes.*)	1260	21st May 1853	Henri Joseph Scoutetten.
Combining materials for making a more perfect fabric for suction hose, and for all other similar purposes to which the same may be applied.	1326	30th May 1853	George Wells.
Manufacture of drain-pipes - - -	1335	31st May 1853	William Frederick Shoebridge.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PIPES, &c.—*continued.*			
Apparatus for laying pipes in the earth; juncture of such pipes.	1347	1st June 1853	Admiral the Earl of Dundonald.
Manufacturing pipes or hollow articles from plastic materials.	1384	4th June 1853	John Whitehead.
Manufacture of pipes or hollow articles from plastic materials - - - - - - -	1642	9th July 1853	Mark Sprott. Robert Denholm.
Construction of pipes, tubes, and other like conduits, for hydraulic or pneumatic purposes.	1854	9th Aug. 1853	Louis Hartog Bruck.
Manufacture or treatment of gutta-percha; application thereof. (*For making tubes.*) (*Communicated by Louis François Alexandre Deseille.*)	1904	13th Aug. 1853	John Henry Johnson.
Manufacture of pipes and such other articles as are or may be moulded in clay.	1921	17th Aug. 1853	John Heritage.
Machinery for the manufacture of pipes, &c. -	1926	17th Aug. 1853	Thomas Grimsley.
Manufacture of pipes or hollow articles from plastic materials - - - - - - -	1970	24th Aug. 1853	Thomas Hill. Alexander Thomson.
Moulding or shaping metals - - -	2058	7th Sept. 1853	David Law. John Inglis.
Manufacture of flexible tubes, &c. - - -	2166	17th Sept. 1853	Christopher Nickels. Ralph Selby.
Manufacture by machinery of tubes from leather or other suitable flexible substance, chiefly for covering the drawing-rolls of spinning-machinery;—also applicable to other purposes.	2171	19th Sept. 1853	Charles Collins.
Manufacture of taper tubes; apparatus connected therewith.	2181	20th Sept. 1853	Ferdinand Potts.
Mode of protecting iron of every kind against the action of the weather, of rain, river, spring and sea water, so that iron thus protected may be used for pipes, gutters, and various other purposes.	2215	27th Sept. 1853	Nicholas Callan.
Manufacture of flexible tubes or pipes - -	2327	11th Oct. 1853	David Dick.
Means of protecting iron of every kind against the action of the weather, and of various corroding substances, so that iron thus protected will answer for pipes, &c.	2340	12th Oct. 1853	Nicholas Callan.
Method of making pipes - - - -	2342	12th Oct. 1853	Thomas Smith.
Manufacture of copper tubes - - -	2421	20th Oct. 1853	William Russell.
Treatment or manufacture of gutta-percha, and application thereof. (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Improvements in casting - - - -	2450	24th Oct. 1853	James Denoon Young.
Manufacture of tubes or tiles &c. - -	2591	8th Nov. 1853	Humphrey Chamberlain.
Manufacture of tiles and tubes - - -	2691	19th Nov. 1853	William Austin.
Obtaining motive-power by means of heated gases - (*Reaction tubes.*)	2768	28th Nov. 1853	Prix Charles Jean Baptiste Sochet.
Machinery for making pipes, sheets, still-worms and other articles, from that class of metals called soft metals, as lead, tin, zinc, bismuth, or alloys of soft metals that are capable of being forced out of metal-receivers or chambers through dies, cores &c.	2784	30th Nov. 1853	Edward Keating Davis

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PIPES, &c.—*continued.*			
Manufacture of tubes of copper and its alloys -	3015	29th Dec. 1853	Edward Estivant.
Improved metallic tubes - - - - -	3017	29th Dec. 1853	Amédee François Remond.
Compositions to be employed as substitutes for caoutchouc, gutta-percha, and certain fatty bodies. (*For making pipes.*)	3045	31st Dec. 1853	Stanislas Tranquile Modeste Sorel.
PISTONS, STUFFING-BOXES; PISTON-PACKINGS.			
Motive-power engines; application of motive power to the same. (*Piston.*)	12	3rd Jan. 1853	Edme Augustin Chameroy.
Steam engines and boilers - - - - (*Packing for pistons.*)	208	27th Jan. 1853	William Galloway. John Galloway.
Combining metals for the packings, &c. of machinery	217	28th Jan. 1853	James Pole Kingston.
Improvements in steam-engines - - (*Pistons.*)	738	28th March 1853	John Scott, junior. George William Jaffray.
An improved piston - - - - -	782	1st April 1853	Robert Evans Peterson.
Construction of pistons of steam and other engines;—applicable also to force-pumps and lifting-pumps. (*And packing.*)	932	18th April 1853	Joel Watts.
Stuffing-boxes of piston-rods - - -	1300	26th May. 1853	William Weatherley. William Jordan.
Axle-boxes, guides, and bearings of locomotive engines and carriages;—partly applicable to the bushings and bearings of machinery. (*Packing the piston.*)	1437	14th June 1853	William G. Craig.
Valves and pistons - - - - - (*Also piston packing.*)	2104	12th Sept. 1853	John Wright Child. Robert Wilson.
Improvements in pistons and piston-rods of steam-hammers and pile drivers, and in the parts in immediate connection therewith. (*Also stuffing-boxes and ring packings.*)	2500	29th Oct. 1853	James Nasmyth.
Machinery for obtaining and applying motive-power, and for raising and forcing fluids. (*Pistons, and packing pistons.*)	2557	3rd Nov. 1853	Joseph Henry Tuck.
A new rotatory steam-engine - - - (*Pistons.*)	2609	11th Nov. 1853	Alexandre Andre Victor Sarrazin de Montferrier.
Improvements in pistons - - -	2700	21st Nov. 1853	Henry Wiglesworth.
Certain improvements in marine steam-engines - (*Pistons.*)	2706	21st Nov. 1853	William Joyce. Thomas Meacham.
Obtaining and applying motive-power - - (*Pistons.*)	2887	12th Dec. 1853	William Evans.
Pistons and stuffing-boxes of engines moved by water, steam, or gas. (*Packing.*)	3021	29th Dec. 1853	Hypolite Charles Vion.
Electric telegraphs and apparatus connected therewith. (*Packing axles.*)	3031	31st Dec. 1853	Henry Vernon Physick.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PLOUGHING, TILLING, DIGGING, CLOD-CRUSHING, HOEING.			
Improvements in ploughs	203	27th Jan. 1853	Charles Henry Alabaster.
A clod-crusher, land-presser, or pulverizer	262	31st Jan. 1853	James Comins.
A new machine with its adjuncts or other apparatus to be used for agricultural purposes. (*Ploughing, digging.*)	497	28th Feb. 1853	Theodore Baron Von Gilgenheimb.
Harrows	501	28th Feb. 1853	Edward Hammond Bentall.
Improvements in ploughs	752	29th March 1853	William Henham.
Construction of ploughs	815	5th April 1853	Smith Flanders.
Machinery for bending wood or other materials (*Plough handles.*)	967	21st April 1853	William Edward Newton.
Machine for several agricultural purposes	1084	4th May 1853	George Bell.
Machine or implement for hoeing, cutting, and otherwise operating upon turnips or other agricultural produce.	1113	6th May 1853	Thomas Murray.
Machinery or apparatus for effecting agricultural operations.	1151	10th May 1853	John Henry Johnson.
Certain improvements in ploughs	1303	27th May 1853	William Henham.
Agricultural implements employed in crushing and rolling land; frames for the same.	1314	28th May 1853	George Harriott.
Machine or apparatus for digging or raising earth, applicable to agricultural or engineering purposes.	1365	3rd June 1853	James Spotswood Wilson.
Digging the soil by means of machinery with horse-power.	1426	13th June 1853	Hugh O'Connor.
Machine for ploughing land, harrowing and crushing clods, at one operation.	1446	15th June 1853	Thomas Butterworth.
Improvements in ploughs	1472	16th June 1853	Joseph Warren.
Working, tilling, or preparing land	1479	17th June 1853	Henry Bleasdale. Joseph Bleasdale.
Improvements in hand hoes	1523	22nd June 1853	Francis Huckvale.
Improvements in ploughs	1842	6th Aug. 1853	Henry Southan.
Application of steam to cultivation	1899	13th Aug. 1853	Chandos Wren Hoskins.
A machine for destroying weeds	1965	23rd Aug. 1853	William M'Leish.
Machinery for digging, breaking, and trenching land.	1980	25th Aug. 1853	Richard Archibald Brooman.
Implements for tilling and preparing land for crops.	2121	13th Sept. 1853	William Smith.
Machinery for digging and tilling land	2147	15th Sept. 1853	Henry Jeanneret.
Machine for digging and cultivating land	2418	19th Oct. 1853	Alexis Dussuc.
Horse rakes and harrows	2544	2nd Nov. 1853	James Howard.
Cultivating and digging the soil by means of a steam digging and harrowing machine.	2580	1st Nov. 1853	Joseph Bauer.
Hoeing and otherwise cultivating land (*Ploughs and rollers.*)	2769	28th Nov. 1853	Robert Hawkins Nicholls.
Apparatus for cultivating, preparing, and treating land, and for sowing seeds. (*Plough and roller.*)	2775	29th Nov. 1853	Patrick Kelly.
An improvement in or addition to ploughs	2779	29th Nov. 1853	Joseph Moore.
Land-rollers or clod-crushers	2788	30th Nov. 1853	John Patterson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESERVING EDIBLE SUBSTANCES; PRESERVING MILK AND OTHER LIQUIDS.			
Apparatus for refrigerating - - - (*Applicable for preserving food.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Preserving butter and other substances - - (*Communicated by Jean Francois Nicolas Bréon.*)	246	31st Jan. 1853	Charles Cowper.
Vessels or apparatus for containing and preserving ale, beer, and other liquids.	415	17th Feb. 1853	Matthias Walker.
Preserving milk and other fluids - -	477	25th Feb 1853	William Symington.
Preparing and preserving soups—"Soyer's Osmazome food."	520	2nd March 1853	Alexis Soyer.
Treatment of corn and other grains, and more especially in all that concerns curing and preserving them - - - - - -	625	12th March 1853	Nicolas Auguste Eugène Millon. Leopold Mouren.
Machinery for cutting or chopping roots, plants, or other similar substances. (*For preserving.*)	1041	29th April 1853	Thomas Collins Banfield.
Drying and preserving vegetable or other saccharine plants.	1042	29th April 1853	Thomas Collins Banfield.
Preserving meat - - - - -	1418	10th June 1853	Henry Eld Symonds.
Vessels or cases for storing and preserving edible substances.	1448	15th June 1853	Alexander Robertson.
Improved process for preserving milk, and its application to several organic products and alimentary substances.	1467	16th June 1853	Peter Armand le Comte de Fontainemoreau.
Preparation of certain vegetable and alimentary substances.	1468	16th June 1853	Peter Armand le Comte de Fontainemoreau.
Apparatus for preserving provisions - -	2205	24th Sept. 1853	William Farmer.
Preparation of vegetable substances for the purpose of preserving the same. (*Potatoes &c.*)	2278	5th Oct. 1853	Henry Stevens.
Vessels for preserving fish alive - - -	2308	8th Oct. 1853	George Lifford Smartt.
Preserving seeds, potatoes, and other roots -	2348	12th Oct. 1853	Charles Scott Jackson.
PRESERVING WOOD, STONE, AND OTHER SUBSTANCES, ALSO EXPOSED SURFACES.			
Rendering wood more durable and uninflammable -	330	7th Feb. 1853	William Romaine.
Preserving wood from decay - - -	508	1st March 1853	John Bethell.
Manufacture of wheels and axles - - - (*Steaming, steeping, or boiling the wood.*)	574	7th March 1853	Thomas Weatherburn Dodds.
Preserving or preventing decomposition in vegetable and animal substances and matters.	740	28th March 1853	George Edward Dering.
Improvements in distillation; apparatus connected therewith; also applicable to other purposes in which substances are to be treated by the assistance of a vacuum - - - - (*Impregnating substances.*)	1018	27th April 1853	Joseph Palin. Robert William Sievier.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESERVING WOOD, &c.—*continued.*			
Treatment of natural and artificial stone, and of articles composed of porous cements or plaster, for the purpose of hardening and colouring the same.	1051	30th April 1853	Barnabas Barrett.
Treatment and preparation of certain natural or artificial stones, applicable to various useful and ornamental purposes.	1087	4th May 1853	Charles Videgrain.
Composition for coating and preventing the decay of exposed surfaces.	1092	4th May 1853	James Edgar Cook.
Manufacture of a composition resembling papier-mâché and carton-pierre, applicable to the same purposes to which papier-mâché and carton-pierre are applied;—partly applicable to the construction of ships and boats, and roofing. (*Rendering such substance repulsive to vermin.*)	1804	2nd Aug. 1853	William Henry Clarke.
Preparation of wood for sheathing ships, as a substitute for copper and other metals, also in house, ship, and pier building.	2323	11th Oct. 1853	Henry Kemp.
Preserving timber and other vegetable matters -	2350	12th Oct. 1853	Charles Scott Jackson.
Treatment or manufacture of gutta-percha, and application thereof. (*For preserving wood by varnishing.*) (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Preparing wood to be employed in the manufacture of casks and other vessels for containing liquids.	2724	23rd Nov. 1853	Joseph Amos.
Mode of coating metals, wood, stone, and plaster, to preserve them from decay.	2864	9th Dec. 1853	John Winspear.
PRINTING, STEREOTYPING, TRANSFERRING.			
I.—Typographic, Lithographic, Copperplate, Block, and Cylinder Printing (*on Paper, Calicoes, Carpets, Yarns &c.*)			
Manufacturing and treating caoutchouc - -	22	5th Jan. 1853	Gustave Eugène Michel Gerard.
Manufacture of blocks for printing music - -	115	17th Jan. 1853	Auguste Edouard Loradoux Bellford.
Copper and other plate and cylinder printing and inking, and wiping and polishing by machinery the engraved plates and cylinders whilst used in the process.	128	18th Jan. 1853	Robert Neale.
Lithographic presses - - - - -	167	22nd Jan. 1853	John Medworth. Lawrence Lee.
Manufacturing of printing-surfaces - - - (*Also taking impressions from, and lithographing.*)	189	25th Jan. 1853	Alfred Vincent Newton.
Block-printing machinery - - - -	276	1st Feb. 1853	Alfred Vincent Newton.
Machinery or apparatus for printing on leaves of books their designations, numbers, or devices, or those of their pages;—may also be used to advantage for printing designating numbers or devices on various other articles.	514	1st March 1853	John McAdams.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &c.—*continued.*			
Machinery for manufacturing bags or envelopes of paper, calico, or textile fabrics. (*Printing paper bags.*)	541	3rd March 1853	John Wright.
Machinery and arrangements for block-printing - (*Printing druggets &c.*)	607	10th March 1853	James Walmsley.
Mode of advertising - - - - - (*Printing on envelopes or margins of papers.*)	618	11th March 1853	Edouard Alexandre.
Machinery for printing woven and other fabrics -	693	21st March 1853	Isaac Taylor.
Improvements in printing - - - - -	696	21st March 1853	John Stather.
Method of preparing, treating, and finishing cut-piled or raised fustians and other similar goods or fabrics; machinery or apparatus connected therewith.	732	26th March 1853	James Worrall, junr.
Improvements in printing - - - - -	737	28th March 1853	Thomas James Perry.
Machinery for weaving and printing - - (*Blocks for printing warps.*)	744	29th March 1853	Luke Smith.
Method of adjustment in the art of printing, by means of certain combinations of various sized spaces and quadrats.	812	5th April 1853	George Purcell.
Printing or producing colours on textile fabrics -	823	6th April 1853	Frederick Albert Gatty.
Manufacture of safety paper - - - - - (*Producing water-marks by transfer.*)	829	6th April 1853	William Johnson.
Ornamenting surfaces or fabrics, applicable to various useful purposes, such as for covers of furniture, imitation tapestry, carpets or hangings. (*Lithographing designs.*)	857	9th April 1853	Herbert Taylor.
Printing yarns or worsteds for weaving carpets, also printing carpets, woollen, silk, cotton, and other textile fabrics or fibrous substances.	933	18th April 1853	William M'Naughton.
Printing shirting fabrics - - - - -	992	25th April 1853	William Tillie. John Henderson.
Machinery or apparatus for printing or staining woven fabrics and paper - - - -	1031	28th April 1853	James Berry. Thomas Booth.
Fixing mordants on fabrics - - -	1056	2nd May 1853	James Greenwood.
An improved construction of printing-machine -	1182	13th May 1853	George Stiff.
Printing or dyeing woven or textile fabrics; manufacturing certain substances to be used in the arts or processes of dyeing and printing.	1193	14th May 1853	James Higgin.
Improvements in printing-machines - -	1217	17th May 1853	James Thomas George Vizetelly. Henry Richard Vizetelly.
Means for distributing and composing types - -	1287	25th May 1853	William Haslett Mitchell.
Printing silk, wool, and other animal fibres -	1317	28th May 1853	François Francillon.
Treating or preparing yarns or threads - - (*Printing.*)	1330	30th May 1853	William Green.
Lithographic printing, being a self-acting lithographic printing-machine to be propelled by hand, steam or other motive-power.	1361	3rd June 1853	William Wahler.
Producing railway and other tickets and cards -	1485	18th June 1853	Guy Hannington.
Printing or producing designs and patterns on stuffs and fabrics.	1553	27th June 1853	Richard Archibald Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &c.—*continued.*			
Manufacture of piled fabrics; machinery for effecting the same.	1568	29th June 1853	Robert Moore Sievier.
Machinery for printing	1603	5th July 1853	Alfred Vincent Newton.
Typographical printing-presses	1609	6th July 1853	Peter Armand le Comte de Fontainemoreau.
Composing and distributing type	1639	9th July 1853	Jean Theodore Boulé. François Cailland.
Machinery for printing	1692	15th July 1853	Isaac Taylor.
Letterpress and other raised surface printing-machines.	1740	23rd July 1853	James Murdoch Napier.
An improvement of the lithographic press	1754	26th July 1853	Frederick Cole.
Facilitating and improving the process of inking in printing.	1755	26th July 1853	Frederick Cole.
Machinery or apparatus for stamping or printing coloured surfaces.	1774	29th July 1853	Griffith Jarrett.
Printing shawls, handkerchiefs, piece-goods, paper-hangings, and similar materials; apparatus connected therewith.	1819	3rd Aug. 1853	John Cumming.
Printing bank-notes, cheques, bills of exchange, and other documents requiring like security against being copied.	1825	4th Aug. 1853	Thomas Moss.
Printing-machinery	1845	6th Aug. 1853	John Green.
A press applicable to lithography, autography, typography, chromo-lithography or printing in colours, copperplate printing, cylinder printing &c.	1861	10th Aug. 1853	Alexander Prince.
Machinery for printing textile fabrics, oil-cloths, leather, paper-hangings, and other similar fabrics or materials.	1936	18th Aug. 1853	William Curtain.
Printing-apparatus	1998	29th Aug. 1853	John Foss.
Manufacture of printing blocks and cylinders	2110	12th Sept. 1853	Alfred Vincent Newton.
Machinery or apparatus for grinding or setting "doctors" used in calico and other similar printing machinery.	2117	13th Sept. 1853	Adolphus Sington.
Improvements in and applicable to machines for printing fabrics.	2126	14th Sept. 1853	John Wilson.
Block-printing (*Shading-block.*)	2134	14th Sept. 1853	Richard Dugdale Kay.
Blocks for block-printing (*Borders for paperhangings.*)	2140	15th Sept. 1853	Charles White.
Distributing printers' type	2148	15th Sept. 1853	Moses Poole.
Machinery or apparatus for printing	2286	6th Oct. 1853	Alfred Hely Hargrave. Ralph Richardson.
An invention for electric telegraph purposes, being an improved printing and signal electric telegraph, with electric alarm attached	2345	12th Oct. 1853	Henry Mapple. Daniel Moore Mapple.
Printing and embossing paper with a view to prevent forgery.	2387	15th Oct. 1853	Augustus Applegath.
Letterpress printing-machinery	2396	17th Oct. 1853	Augustus Applegath.
Printing textile fabrics and other surfaces	2410	19th Oct. 1853	William Roy, senior.
Typographic printing	2413	19th Oct. 1853	William Little.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &c.—*continued.*			
Treatment or manufacture of gutta-percha and application thereof. (*Rollers and presses.*) (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Printing or producing colours on textile fabrics -	2440	21st Oct. 1853	Frederick Albert Gatty.
Printing-machinery - - -	2451	24th Oct. 1853	Charles Brewster.
An improved construction of printing-press -	2463	25th Oct. 1853	Alfred Vincent Newton.
Manufacture of carpets - - - (*Printing warps.*)	2470	26th Oct. 1853	George Gower Woodward.
Printing yarns or worsteds for weaving carpets, also printing carpets, woollen, silk, cotton, and other textile and felted fabrics or fibrous substances.	2490	27th Oct. 1853	William M'Naughton.
Lithographic printing-presses - - -	2505	29th Oct. 1853	Andrew Maclure.
Printing textile fabrics and other surfaces - -	2515	31st Oct. 1853	Anthony Park Coubrough.
Machinery or apparatus for printing yarns -	2531	1st Nov. 1853	James Heywood.
Machinery for distributing type - -	2647	15th Nov. 1853	Adrien Delcambre.
Fixing colours on yarns and cloths - -	2654	16th Nov. 1853	John Ronald.
Printing textile fabrics and other surfaces - -	2680	18th Nov. 1853	James Melville.
Manufacture of carpets - - - (*Preparing the yarn for printing.*)	2694	19th Nov. 1853	John Gerald Potter.
Printing oil-cloths and other fabrics - - (*Also carpets.*) (*Communicated by Benjamin Underwood.*)	2836	6th Dec. 1853	John Henry Johnson.
Ornamenting a certain description of textile fabric - ("*Raised*" *cloths.*)	2842	7th Dec. 1853	Andrew Lawson Knox.
Ornamenting or producing pictures on japanned goods, panels, canvas, or other material, whereby a vast amount of artistic skill and labour is superseded.	2870	9th Dec. 1853	Gideon Morley.
Printing-presses - - - - -	2895	14th Dec. 1853	Philip Grant.
Printing and dyeing cotton-wool, silk and other fibrous substances - - -	2896	14th Dec. 1853	Frederick Albert Gatty. Emile Kopp.
Ornamenting certain descriptions of textile fabrics - (*Printing or staining terry fabrics.*)	2934	16th Dec. 1853	Andrew Lawson Knox.
Process of bleaching vegetable fibrous substances - (*Preparing for printing.*) (*Communicated by Charles Custer.*)	2948	19th Dec. 1853	John Tribelhorn. Dr. Pompejus Bolley.
System of painting by means of lithography, without leaving a particle of paper upon the canvas.	2974	22nd Dec. 1853	Louis Adolphe Ferdinand Besnard.
Printing with colours on cloth;—also applicable to printing ornamental designs on paper or other surfaces - - - -	3012	28th Dec. 1853	Duncan M'Nee. Alexander Broadfoot.
Printing warps of cut-pile and similar fabrics -	3020	29th Dec. 1853	Claude Alphonse Roux.
Manufacturing, ornamenting, and applying fabrics for articles of clothing. (*Printing dresses, under-skirts, &c.*)	3024	30th Dec. 1853	James Lord.
See also "CYLINDERS, &c." For Telegraphic Printing—*see* "TELEGRAPHS, &c."			

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &c.—*continued.*			
II.—Printing and Transferring on Wood, Metal, Glass, Enamel, Earthenware, Stone, and Bricks.			
Method of lettering, figuring, and ornamenting the surface of enamel used for dials and other purposes. (*By transfer.*)	26	5th Jan. 1853	Francis Edwards.
Application of the processes of lithographic and zincographic printing of words, patterns, designs, and marks, on metal, glass, wood, and other hard and unyielding substances, in sheets, slabs, or flat pieces, with or without the intervention of paper or other flexible material - - -	2115	13th Sept. 1853	Charles Frederick Adams. William Gee. George Davis.
Ornamenting the materials of and articles manufactured in pottery, as bricks, tiles, slabs &c., also glass, slate, stone, and other plastic substances - (*Stencilling and transferring.*)	2532	1st Nov. 1853	Thomas Sanders Bale. Daniel Lucas.
Certain tablets, labels, and signs, or their surfaces, exhibiting letters and designs. (*Printing glass.*)	2913	15th Dec. 1853	Frederick William Branston.
III.—Preparing Printing-surfaces.			
Manufacture of printing-surfaces - - -	189	25th Jan. 1853	Alfred Vincent Newton.
Manufacture of printing-surfaces - - -	410	16th Feb. 1853	Alfred Vincent Newton.
Improvements in printing - - - - -	696	21st March 1853	John Stather.
Producing plates or surfaces which may be used as printing or embossing surfaces &c.	796	4th April 1853	William Edward Newton.
Producing printing surfaces - - - - -	1164	11th May 1853	William Bradbury. Frederick Mullett Evans.
Production of printing-surfaces - - -	1546	24th June 1853	Leon Valls.
Method of forming designs and patterns upon papier-mâché, japanned iron, glass, metal, and other surfaces.	1714	19th July 1853	Charles Breese.
Mode of producing printing-surfaces - - (*In relief on metal plates.*)	2434	25th Oct. 1853	David Bogue.
Producing plates for printing purposes by which the manipulatory process of engraving is superseded.	2481	26th Oct. 1853	James Thomas George Vizeteley.
Production of printing-surfaces - - - (*Communicated by Auguste Feldetrappe.*)	2748	27th Nov. 1853	John Henry Johnson.
Printing oil-cloths and other fabrics - - (*Preparing blocks or surfaces.*) (*Communicated by Benjamin Underwood.*)	2836	6th Dec. 1853	John Henry Johnson.
See also "ENGRAVING," &c.			

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, DRIVING, WORKING, DISTRIBUTING POWER.			
I.—Propelling and Towing Ships &c.; Propellers and Oars; Working Propellers.			
Propelling vessels - - - - - -	28	5th Jan. 1853	Herbert Newton Penrice.
Construction of ships or other navigable vessels; machinery or apparatus connected therewith.	33	6th Jan. 1853	John Browne.
Propulsion and supporting of vessels, vehicles, and other bodies, on, through, and over the water.	52	7th Jan. 1853	James Egleson Anderson Gwynne.
Propelling vessels - - - - - -	134	19th Jan. 1853	Thomas Judge.
Propelling vessels - - - - - -	152	21st Jan. 1853	George Thornton.
Propelling ships and other floating vessels - -	175	24th Jan. 1853	Donald Beatson.
Propelling vessels - - - - - -	177	24th Jan. 1853	Charles Randolph. John Elder.
A twin-stern ship or vessel with a protected propeller.	204	27th Jan. 1853	Alfred Barnes Sturdee.
Constructing ships and vessels propelled by screw or such like propeller. (*Shipping and unshipping propellers.*)	219	28th Jan. 1853	John Scott Russell.
Propelling vessels through the water by means of tubular propellers, consisting of a tube or tubes containing each a piston moved by steam or any other motive-power.	245	31st Jan. 1853	Charles Caulfield.
Propelling steam-vessels - - - - -	290	3rd Feb. 1853	Thomas Spiller. Anthony Crowhurst.
Machinery used for raising propellers - -	309	4th Feb. 1853	John Dudgeon.
Propelling steam-vessels - - - - -	329	5th Feb. 1853	Joseph Cowan.
An improved propeller, as to affixing the blades in the boss and affixing the bosses to the spindle or centre shaft; mode of placing, controlling, lowering, and detaching the same.	337	8th Feb. 1853	John Buchanan.
Propelling of vessels - - - - - -	411	17th Feb. 1853	John Collis Browne.
Propelling, steering, and regulating vessels -	424	18th Feb. 1853	Peter Madden.
Propelling - - - - - - - -	436	19th Feb. 1853	Pierre Auguste Tourniere.
Propelling vessels - - - - - -	492	26th Feb. 1853	Robert Griffiths.
Propelling vessels of all descriptions that float on water, that are capable of carrying steam or any other engines used for the purpose of giving power to propel vessels &c.	509	1st March 1853	Joseph Clisild Daniell.
Making paddle-wheels for vessels propelled by motive-power—"Cylinder paddle-wheel."	512	1st March 1853	William Rowett.
Propelling and steering vessels; apparatus used therein.	528	3rd March 1853	William Clark.
Screw-propellers for ships and other vessels -	559	5th March 1853	Joseph Maudslay.
Screw-propellers for ships and other vessels -	646	15th March 1853	Joseph Maudslay.
An improved eccentric engine applicable to the purposes of general navigation. (*A propeller.*)	650	16th March 1853	John Vanden Hielakker.
Propelling vessels - - - - - -	719	24th March 1853	Charles Augustus Holm.
Certain improvements in ships' propellers - -	734	28th March 1853	John George Truscott Campbell.
Propelling ships and other vessels - - -	754	29th March 1853	John Pym.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Propelling vessels	949	19th April 1853	Andrew Blair.
Machinery or apparatus for propelling vessels	970	22nd April 1853	William Sager.
Improvements in oars	982	23rd April 1853	James Geddes.
Propelling vessels	1082	3rd May 1853	Frederick Lipscombe.
Propelling vessels and other vehicles on the water	1103	5th May 1853	John Rawe, junior.
Improvements in propelling vessels	1109	5th May 1853	Thomas Symes Prideaux.
Machinery for propelling vessels; mode of manufacturing the same.	1135	9th May 1853	John Fisher.
Improvements in propelling	1166	11th May 1853	Julian François Belleville.
Propelling vessels and carriages; — parts of the machinery therein employed being also applicable to other like purposes.	1172	12th May 1853	George Frederic Goble.
Mode and apparatus for working the machinery in ships in connection with the steam-engines or steam-power now used therein.	1221	18th May 1853	Christopher Richard Norris Palmer.
Navigable vessels to be employed in all waters and to be propelled or impelled by sails, steam-power, or other means.	1262	21st ay 1853	Auguste Edouard Loradoux Bellford.
Construction of vessels to be used chiefly at various depths under the surface of the water; machinery or apparatus connected therewith for propelling, balancing, and steering the same &c.	1281	25th May 1853	William Bauer.
Construction of screw-propeller	1333	30th May 1853	John George Appold.
Propelling vessels	1341	1st June 1853	Alfred Hardwick.
Improvements in propelling	1345	1st June 1853	Maxwell Scott.
Propelling vessels	1407	9th June 1853	George William Garrood.
System of towing and traction	1409	9th June 1853	Claude Arnoux.
Machinery for propelling vessels and other machinery—"A crank propeller"	1439	14th June 1853	Joseph H. Penny. Thomas B. Rogers.
Mechanism to decrease friction in propelling machinery and to compensate for the wear thereof, and to strengthen the driving parts. (*Wheels for driving screw-propellers; obtaining reverse action.*)	1574	30th June 1853	Elias Robison Handcock.
Moving boats on canals and rivers	1685	15th July 1853	Charles Liddell.
Steam engines and boilers for marine purposes (*Making the screw-propeller shaft hollow and tubular.*)	1775	29th July 1853	James Edward M'Connell.
Apparatus for propelling vessels	1776	29th July 1853	James Mackay.
Paddle-wheels for propelling vessels	1784	30th July 1853	Auguste Edouard Loradoux Bellford.
Propelling vessels	1786	30th July 1853	John Buchanan.
Improved propeller; method of driving the same	1803	2nd Aug. 1853	William Lanphir Anderson.
Canal and river navigation; vessels used in such navigation; mode of propelling the same.	1820	3rd Aug. 1853	William Hickson.
Propelling steam-vessels or other vessels	1865	10th Aug. 1853	David Mushet. Edwin Whele.
Propelling vessels	1913	16th Aug. 1853	Benjamin Rankin.
An improvement in paddle-wheels	2025	31st Aug. 1853	Richard Archibald Brooman.
Propelling floating vessels; mode of applying the propellers.	2091	10th Sept. 1853	Stopford Thomas Jones.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Means of setting in motion and propelling ships, vessels, and boats of every description, upon seas, rivers, canals, and inland waters.	2151	16th Sept. 1853	Francis Higginson.
Propelling ships and other vessels - - -	2172	19th Sept. 1853	William Lanphier Anderson.
Improvement in paddle-wheels - - -	2195	22nd Sept. 1853	George White.
Propelling ships and vessels - - -	2247	1st Oct. 1853	Jean Marie Letestu.
Propelling-machinery - - - -	2258	3rd Oct. 1853	William Henry Wilding.
Paddle-wheels for navigable vessels - - -	2334	11th Oct. 1853	William Henry Muntz.
Improvements in propelling vessels - -	2671	17th Nov. 1853	Robert Griffiths.
Propelling and steering vessels - - -	2822	5th Dec. 1853	William Simons.
Paddle-wheels for propelling vessels - -	2949	19th Dec. 1853	Auguste Edouard Loradoux Bellford.
An improved propeller - - - - (*Also feathering and reversing.*)	2953	19th Dec. 1853	David Goldthorp.
Improvements in propelling vessels - -	2971	21st Dec. 1853	John Jones.
A new system of propulsion - - -	2989	24th Dec. 1853	George Goutaret.
Obtaining and applying motive-power - -	3042	31st Dec. 1853	Benjamin Hunt.
II.—Impelling or Drawing Carriages.			
Railways; propulsion of engines, carriages, and other vehicles thereon.	48	7th Jan. 1853	George Stewart.
Application of steam to the propulsion of carriages on common roads;—partly applicable to the construction of carriages for common roads.	53	8th Jan. 1853	Robert Lovely.
Propelling carriages on roads, to which engines for the purpose of giving power to work them can be applied.	509	1st March 1853	Joseph Clisild Daniell.
Certain improvements in the application of atmospheric propulsion upon railways.	652	16th March 1853	William Malins.
Improvements in propelling - - -	1166	11th May 1853	Julian François Belleville.
Propelling carriages;—parts of the machinery therein employed being also applicable to other like purposes.	1172	12th May 1853	George Frederic Goble.
System of towing and traction - - - (*Applicable on railways.*)	1409	9th June 1853	Claude Arnoux.
Starting &c. vehicles - - - -	1720	20th July 1853	Phillippe Poirier de St. Charles.
Machinery for propelling carriages - - -	1722	20th July 1853	James Mills.
Obtaining motive-power - - - -	1868	11th Aug. 1853	Thomas Dewsnup.
Machinery for obtaining motive-power - - (*Propelling on commons roads.*)	2112	12th Sept. 1853	Charles Cannon.
Obtaining and applying motive-power - -	2477	26th Oct. 1853	Frederick Ludewig Hahn Danchell. William Startin.
Applying motive-power - - - - (*Driving locomotives by clock-work.*)	2805	2nd Dec. 1853	George Williamson.
Obtaining and applying motive-power - -	3042	31st Dec. 1853	Benjamin Hunt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
III.—Driving or Actuating Machinery.			
Apparatus or mechanism for driving machinery through the agency of water.	18	4th Jan. 1853	Charles John Burnett.
Obtaining motive-power	100	14th Jan. 1853	John Henry Vries.
Mode of giving and transmitting multiplying rotative motion to shafts and other revolving bodies	170	22nd Jan. 1853	Arthur Wellington Callen. Abraham Ripley.
Transmitting motive-power to machinery; regulating the action of rotary machines.	239	29th Jan. 1953	William Constable.
Construction and use of coffee-roasters (*Actuating the cylinder.*)	273	1st Feb. 1853	John Cockerill. Thomas Barnett.
Method of actuating ships' pumps by the motion of the vessel at sea, also applicable to other purposes	274	1st Feb. 1853	Thomas Williams. James Plimton. Robertson Buchanan.
Machinery or apparatus applicable to planing, slotting, shaping, grooving, or other similar purposes. (*Obtaining a working movement.*)	364	11th Feb. 1853	Robert Thomas.
Apparatus or mechanism for driving machinery through the agency of water.	380	14th Feb. 1853	Charles John Burnett.
Mode of raising water	385	14th Feb. 1853	Francis Clarke Mouatis.
Machinery for planing slate	472	24th Feb. 1853	Thomas Browne Jordan.
Machinery or apparatus for cutting paper and other substances. (*Actuating the knife.*)	593	9th March 1853	James Hogg, junior.
Machinery for spinning and doubling cotton and other fibrous substances.	714	24th March 1853	William Prior Sharp.
Paper and cardboard cutting machines	833	7th April 1853	William Morgan.
Machinery for loading and unloading colliers and other ships and vessels. (*Working cranes.*)	839	7th April 1853	Robert Pattison Clark.
Machinery for crushing sugar-canes (*Driving sugar-mills.*)	851	8th April 1853	Henry Oliver Robinson.
Machinery to be actuated by water or air (*Driving water and wind mills.*)	855	9th April 1853	George Frederick Goble.
Distributing power to machine shops, factories, and other places.	1024	27th April 1853	Richard Jordon Gatling.
Apparatus for actuating and regulating the throttle valves of steam-engines.	1059	2nd May 1853	Edwin Heywood.
Applying the ascensional force of balloons to various useful purposes. (*As working machinery.*)	1088	4th May 1853	Jean Brando Giannetti.
Mode and apparatus for working the machinery in factories in connection with the steam-engines or steam-power now used therein.	1221	18th May 1853	Christopher Richard Norris Palmer.
Method of driving shafting	1380	4th June 1853	William Dray.
System of towing and traction (*Working steam-ploughs.*)	1409	9th June 1853	Claude Arnoux.
Method of driving shafting so as to obtain two revolutions of a screw or other shaft to one revolution of a driving shaft, or to obtain the converse result.	1660	12th July 1853	Nesserwanjee Ardaseer.
Rotatory engines	1767	27th July 1853	Ange Louis du Temple de Beaujeu.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Communicating motion to agricultural implements	1810	3rd Aug. 1853	Thomas Atkins.
Obtaining motive-power	1868	11th Aug. 1853	Thomas Dewsnup.
Thrashing-machines; apparatus connected therewith. (*Communicated by Germain Sommeiller.*)	2284	6th Oct 1853	John Henry Johnson.
Machinery or apparatus for printing	2286	6th Oct. 1853	Alfred Hely Hargrave. Ralph Richardson.
Machines for drilling or boring metals or other substances.	2296	7th Oct. 1853	Joseph Porter.
Revolving shutters and other closures for portable and other buildings	2341	12th Oct. 1853	Patrick Clark. Alexander Clark.
Machine for digging and cultivating land	2418	19th Oct. 1853	Alexis Dussue.
Machinery for combing flax, tow, wool, and other fibrous substances	2432	21st Oct. 1853	James Garth Marshall. Peter Fairbairn.
Mills for grinding (*Communicated by Messrs. Fromont and Son.*)	2447	22nd Oct. 1853	John Henry Johnson.
Obtaining power by electro-magnetism (*For driving machinery.*)	2498	28th Oct. 1853	John Walker Wilkins.
Abstracting and condensing smoke arising from steam-engine and other furnaces; obtaining a supply of air for supporting the combustion of the fuel in such furnaces, thereby superseding the necessity of chimney-shafts and funnels (*Driving-fans.*)	2548	3rd Nov 1853	William Wood.
Machinery for raising, moving, and lowering heavy bodies (*Working cranes.*)	2597	9th Nov. 1853	Thomas Dunn. James Bowman. Joseph Dunn.
Thrashing-machines and apparatus connected therewith. (*Communicated by Monsieur Lots.*)	2655	16th Nov. 1853	John Henry Johnson.
Certain Improvements in straining mill-saws	2761	26th Nov. 1853	Auguste Edouard Loradoux Bellford.
Applying motive-power (*Driving machinery by clock-work.*)	2805	2nd Dec. 1853	George Williamson.
Machines for producing shoddy from woven fabrics and for sorting the fibres of fibrous materials. (*Actuating rag-picking machines.*)	2858	9th Dec. 1853	Jean Baptiste Edouard Rüttre.
Slubbing and roving frames for cotton and other fibrous substances (*Driving the shafts.*)	2865	9th Dec. 1853	Richard Eccles. John Mason. Leonard Kaberry.
Improvements in forge-hammers (*Working.*)	2883	10th Dec. 1853	Nicolas Victor Guibert.

For Actuating Breaks—*see* "RAILWAYS (Buffers, &c.);" *also* "COACH-BREAKS."
For Driving Sewing-machines—*see* SEWING, &c."
For Actuating Looms—*see* "WEAVING, &c."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PUMPING; RAISING WATER AND OTHER LIQUIDS, PUMPING SHIPS.			
Construction of centrifugal pumps	14	3d Jan. 1853	Charles Edwards Amos.
Certain improvements in pumps	93	13th Jan. 1853	John Rumley.
Improved pumping-machinery	109	15th Jan. 1853	John Arrowsmith.
Steam-engines;—applicable wholly or in part to pumps and other motive-engines.	136	19th Jan. 1853	Joseph Maudslay.
Raising and forcing water and other fluids	192	25th Jan. 1853	Henry Habberley Price.
Marine pumps and apparatus connected therewith	211	28th Jan. 1853	James Learmont.
Ships' fire-engines (*Pumps.*)	236	29th Jan. 1853	James Shand.
Engines to be worked by steam or other fluid (*Applicable as a pump.*)	258	31st Jan. 1853	Frederick Lawrence. William Davison. Alfred Lawrence.
Pumps or apparatus for raising and forcing fluids	343	9th Feb. 1853	William Binks. Samuel Bennett. Thomas Storey.
Mode of raising water	385	14th Feb. 1853	Francis Clarke Mouatis.
Machinery for raising and forcing water and other fluids.	455	23rd Feb. 1853	John Smith.
Steam-engines	525	2nd March 1853	Robert Waddell.
Rotatory engines for obtaining motive-power and for transmitting aeriform bodies and fluids. (*Applicable as a pump.*)	532	3rd March 1853	Robert Barclay.
Life-boats (*Discharging water therefrom.*)	563	7th March 1853	William Barrington.
Machinery or apparatus for raising water and other fluids	661	17th March 1853	James Roscow. Robert Bullough.
Generating steam and other vapours (*Pumping fused metal into the boiler.*)	690	21st March 1853	Moses Poole.
Engines or apparatus for raising and forcing liquids and fluids.	725	26th March 1853	Joseph Morgan.
A podombroslontron or an improved apparatus for either sponge or shower bath and all lavatory purposes. (*Actuating diaphragm pumps.*)	726	26th March 1853	Robert Hazard.
Improvements in steam-engines (*Working the air, bilge, and feed pumps.*)	738	28th March 1853	John Scott, junior. George William Jaffrey.
Machinery to be actuated by water or air	855	9th April 1853	George Frederick Goble.
Fittings of bilge pumps and injection cocks of iron steamers and sailing vessels.	913	14th April 1853	Alexander Crichton.
Applying the ascensional force of balloons to various useful purposes.	1088	4th May 1853	Jean Brando Giannetti.
Lifting and forcing water and other fluids	1147	10th May 1853	Robert Brown.
Machinery or apparatus applicable for pumping water and supplying steam-boilers with water and maintaining the water therein at a proper level.	1239	19th May 1853	William Edward Newton.
Apparatus for raising and forcing water or other fluids	1274	23rd May 1853	William James Sluce. George Benjamin Mather. Philip Wood.
Improvements in pumps	1488	18th June 1853	Thomas Adamson. William Adamson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PUMPING, &c.—*continued.*			
Rotatory engines - - - - - - (*Turbines.*)	1767	27th July 1853	Ange Louis du Temple de Beaujeu.
Improvements in rotary pumps - - -	1992	27th Aug. 1853	Henri Georges Cordier.
Improvements in the working barrels of pumps, which improvements are also applicable to lining other metallic tubes.	2024	31st Aug. 1853	John Phillips Grazebrook.
Hydraulic engines - - - - - -	2228	28th Sept. 1853	Michel Ovide Bernard Lesage.
Machinery or apparatus for raising fluid and solid substances - - - - - - - (*Water, grain, and sand.*)	2257	3rd Oct. 1853	James Leadbetter. William Wright.
Machinery for raising or propelling elastic and non-elastic fluids.	2290	6th Oct. 1853	Charles Augustus Holm.
Rotatory pumps - - - - - - -	2540	2nd Nov. 1853	Brand Willis. John Musto.
Steam machinery and pumps for lifting water from mines and other places - - - -	2573	5th Nov. 1853	Charles Carr. William Kyle Horsley.
Ships' and other pumps - - - - -	2716	22nd Nov. 1853	Charles Ramsay.
Construction of double-action pump - -	2734	24th Nov. 1853	Stephen Holman.
Certain improvements in straining mill-saws - (*Air compressing pump.*)	2761	26th Nov. 1853	Auguste Edouard Loradoux Bellford.
An improved hydraulic machine - - - (*For raising water and pumping ships.*)	2923	16th Dec. 1853	Alphonse Médail.
Machinery for crushing, washing and amalgamating gold and other ores and substances. (*Raising the water.*)	2965	20th Dec. 1853	R. B. Huygens.
Method of obtaining power to raise liquids; treating the said liquids when raised; using them to obtain additional power.	2973	22nd Dec. 1853	John Youil.
QUARTZ AND ORE CRUSHING AND PULVERIZING.			
Steam-machinery used for crushing, &c. - -	102	14th Jan. 1853	Frederic Joseph Bramwell. Isham Baggs.
Apparatus for separating gold from matter mixed or combined therewith.	233	29th Jan. 1853	Marcus Spring.
Separation of certain metals from their ores or other compounds.	326	5th Feb. 1853	Alexander Parkes.
Mode of smelting iron and other ores; manufacture of lime.	332	7th Feb. 1853	John Londe Tabberner.
Operating upon auriferous quartz, clays, and other minerals, preparatory to and in order to accomplish the separation of the gold and other metals; machinery or apparatus for the purpose.	374	12th Feb. 1853	George Henry Bursill.
Obtaining copper and zinc from their ores - -	388	15th Feb. 1853	John Bethell.
Smelting or reducing iron ore, ironstone, or slag or scoriæ. (*Crushing and mixing.*)	683	19th March 1853	George Dalton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
QUARTZ, &c.—*continued.*			
Machinery for forging, stamping, crushing, or otherwise treating metals, ores, and other similar materials.	1060	2nd May 1853	James Reeves.
Machinery for crushing auriferous quartz - - (*Communicated by Mr. H. Berdan.*)	1105	5th May 1853	Jean Conrad Stiffel.
Machinery for washing ores and separating metals from earth or other compounds.	1161	11th May 1853	John Mottram.
An improved forge-hammer - - - (*Communicated by Jean Schmerber.*)	1272	23rd May 1853	John Henry Johnson.
Machinery for pulverizing and washing quartz or ore	1476	17th June 1853	Auguste Edouard Loradoux Bellford.
Machinery or apparatus for reducing and pulverizing gold and other metalliferous quartz and earths; separating metal therefrom.	1590	2nd July 1853	Lemuel Wellman Wright.
Quartz crushing, pulverizing, and amalgamating machine.	1605	5th July 1853	Moses Poole.
Manufacture of iron - - - (*Pulverizing.*)	1665	13th July 1853	John Londe Tabberner.
Crushing and washing ores and earths - -	1717	20th July 1853	Edwin Dalton Smith.
Machinery for crushing, grinding, and pulverizing, stone, quartz, or other substances.	1945	20th Aug. 1853	John Webster Cochran.
Crushing and pulverizing quartz and other substances (*Communicated by T. Briggs Smith.*)	1958	23rd Aug. 1853	Moses Poole.
Machinery for crushing and grinding mineral and other substances.	2113	12th Sept. 1853	Alfred Vincent Newton.
Machinery for breaking stones and other hard substances.	2357	13th Oct. 1853	Sir John Scott Lillie.
Machinery for crushing ores; separating therefrom gold, silver, or other metals contained therein.	2564	4th Nov. 1853	William Edward Newton.
Crushing and grinding quartz, minerals, and other matters.	2932	16th Dec. 1853	Robert Burt Hall.
Machinery for crushing, &c. gold and other ores and substances.	2965	20th Dec. 1853	R. B. Huygens.
Machinery for grinding auriferous and other ores, and separating the metal therefrom.	3033	31st Dec. 1853	John Pym.
Grinding, &c. quartz and other matters containing gold - - - - -	3035	31st Dec. 1853	Alfred Trueman. Isham Baggs.
For Washing, Amalgamating, and Sifting—*see* "METALS."			
RAGS AND WASTE (*Tearing, Cutting, Recovering Fibres from*).			
An improved rag tearing and separating machine -	780	26th March 1853	Richard Archibald Brooman.
Machinery for obtaining wool, silk, and fibres from fabrics and rendering them suitable to be again employed.	941	19th April 1853	LambertAdolpheBeauvais.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAGS, &c.—*continued.*			
Machinery used for combing silk waste and other fibrous substances.	981	23rd April 1853	Henry Houldsworth.
Machinery for combing silk waste and other fibrous substances.	1029	28th April 1853	John Hetherington.
Obtaining wool from fabrics in a condition to be again used.	1835	5th Aug. 1853	James Lee Norton.
Separating or recovering the wool from cotton and woollen or other similar mixed fabrics, whereby the wool is rendered capable of being again employed - - - - -	1891	12th Aug. 1853	William Aldred. Richard Fenton. William Crone.
Converting certain refuse materials into yarn for the manufacture of woven and other fabrics.	2061	7th Sept. 1853	George Edward Ashton.
Method of treating silk waste arising from winding, warping, and weaving silk, and rendering it capable of being spun or otherwise employed -	2379	15th Oct. 1853	Buckley Royle. William MacEwan Cheil.
Machinery for cutting rags, rope, fibrous and other substances - - - - -	2460	25th Oct. 1853	Alfred Curtis. Bryan Donkin.
Machines for producing shoddy from woven fabrics, and for sorting the fibres of fibrous materials.	2858	9th Dec. 1853	Jean Baptiste Edouard Rüttre.
RAILWAYS; RAILWAY-CARRIAGES; ATMOSPHERIC RAILWAYS.			
1.—Permanent Way, Rails and Trams.			
Permanent way of railways - - -	44	7th Jan. 1853	Charles de Bergue.
Railways; propulsion of engines, carriages, and other vehicles thereon.	48	7th Jan. 1853	George Steward.
Mode of constructing certain works applicable to railways, embankments, and other useful purposes.	247	31st Jan. 1853	Samuel Perkes.
Construction and formation of granite and stone pavements and surfaces for carriage and railways.	267	31st Jan. 1853	Charles Hadley.
Railways - - - - -	412	17th Feb. 1853	William Bridges Adams.
Improvements in the permanent way of railways -	413	17th Feb. 1853	James Murphy.
Rolling and shaping malleable metals - - (*Applicable for making railway bars.*)	701	22nd March 1853	William Johnson.
Permanent way of railways - - -	755	29th March 1853	John Pym.
Machinery for manufacturing and rolling iron - (*For rails.*)	804	4th April 1853	Charles May.
Method of railway traction—"A pony railway." -	846	8th April 1853	William Moseley.
Construction of railways - - - (*Rails.*)	962	21st April 1853	Henry Carr.
Permanent way of railways - - -	1014	27th April 1853	Joseph Walter Gale.
Permanent way of railways - - -	1245	19th May 1853	Charles de Bergue.
Permanent way of railways - - -	1427	13th June 1853	William Henry Smith.
Certain improvements in railways and locomotives running thereon, which improvements facilitate the ascension of steep inclines.	1548	25th June 1853	Antoine Andraud.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
Permanent way of railways	1573	29th June 1853	Lemuel Wellman Wright.
Constructing and fixing the rails of railways	1624	8th July 1853	Benjamin Dangerfield. Benjamin Dangerfield, junior.
Permanent way of railways	1780	30th July 1853	George Katz Douglas.
Permanent way of railways	1793	1st Aug. 1853	John Shae Perring.
Improvements in railways	1855	9th Aug. 1853	William Baines.
Permanent way of railways	1956	23rd Aug. 1853	Charles Cowper.
Manufacture of rails and parts of railways, and tires of railway-wheels.	1991	27th Aug. 1853	John Davie Morries Stirling.
Permanent way of railways	2138	14th Sept. 1853	Thomas Swingler.
Construction of rails for railways	2259	3rd Oct. 1853	Alfred Stanistreet Jee.
Joining the ends of the rails of railways	2311	8th Oct. 1853	Charles May. James Samuel.
Improvements in the manufacture of malleable iron, which improvements are also applicable to the manufacture of other malleable metals. (*For making rails.*) (*Communicated by Clement Desormes.*)	2568	4th Nov. 1853	John Henry Johnson.
Construction of railways	2595	8th Nov. 1853	George Shepherd.
Construction of the permanent way of railways	2780	23rd Nov. 1853	Thomas William Kinder.
Construction of tramways	2789	30th Nov. 1853	Alphonse Loubat.
Excavating and dredging machine	2801	2nd Dec. 1853	Arthur Wellington Callen.
Manufacture of rails for railways	2812	2nd Dec. 1853	Jonathan Saunders.
Construction of metallic bridges and other similar structures (*Rolling rails for railways.*)	2818	3rd Dec. 1853	Henry Jeremiah Iliffe. James Newman.
Apparatus for applying sand to the rails of railways.	2853	8th Dec. 1853	James Beall.
Connecting the rails of railways	3030	31st Dec. 1853	John Milner.
II.—Turntables; Raising and Replacing Carriages, &c.			
Construction of bearings or steps for shafts, turntables, or moveable platforms—"Parry's improvements."	39	6th Jan. 1853	William Edward Newton.
Construction and formation of granite and stone pavements and surfaces for carriage and rail ways. (*Rails or grooves in lieu of turntables.*)	267	31st Jan. 1853	Charles Hadley.
Turntables used for railway and other purposes	1099	4th May 1853	James Walker.
A new or improved turntable	1180	13th May 1853	John Arrowsmith.
Construction of turntables	2437	21st Oct. 1853	Samuel Lloyd.
Apparatus for shifting carriages, waggons, engines, and other vehicles, on railways and tramways. (*Replacing on the line.*)	2558	4th Nov. 1853	James Scott.
Machinery for raising, moving, and lowering heavy bodies (*Raising engines or carriages.*)	2597	9th Nov. 1853	Thomas Dunn. James Bowman. Joseph Dunn.
Preventing accidents on railways; shifting and lifting railway-carriages.	2606	10th Nov. 1853	Peter Armand le Comte de Fontainemoreau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
XIII.—Chairs and Sleepers.			
Permanent way of railways - - - (*Making and casting chairs.*)	44	7th Jan. 1853	Charles de Bergue.
Construction and formation of granite and stone pavements and surfaces for carriage and rail ways. (*Blocks for sleepers and chairs.*)	267	31st Jan. 1853	Charles Hadley.
Giving elasticity to certain structures and parts thereof. (*Railway-sleepers.*)	270	1st Feb. 1853	Thomas Charles Clarkson.
Rendering wood more durable and uninflammable - (*For railway-sleepers.*)	330	7th Feb. 1853	William Romaine.
Railways - - - - - - -	412	17th Feb. 1853	William Bridges Adams.
Improvements in fishes and fish-joints for connecting the rails of railways.	651	16th March 1853	Charles Heard Wild.
Permanent way of railways - - -	755	29th March 1853	John Pym.
Construction of railways - - - - (*Chairs.*)	962	21st April 1853	Henry Carr.
Permanent way of railways - - -	1014	27th April 1853	Joseph Walter Gale.
Permanent way of railways; also chairs and sleepers	1245	19th May 1853	Charles de Bergue.
Manufacture and piling of iron to be used in the production of railway-chairs - - -	1400	7th June 1853	Thomas Davis. Boaz Bloomer. Boaz Bloomer, junior.
Permanent way of railways - - -	1573	29th June 1853	Lemuel Wellman Wright.
Improvement in railways - - - - (*Chairs.*)	1855	9th Aug. 1853	William Baines.
Supporting rails of railways - - -	2136	14th Sept. 1853	George Spencer.
Permanent way of railways - - - (*Sleepers.*)	2138	14th Sept. 1853	Thomas Swingler.
Construction of railway-chairs; method of fixing the railway-bars or tram-plates to the chair; mode of manufacturing railway-chairs - -	2303	8th Oct. 1853	John Poole. James Colquhoun Kemp.
Railway-switches - - - - - (*Also chairs and sleepers.*)	2320	10th Oct. 1853	Richard Archibald Brooman.
Preparation of wood for sheathing ships, as a substitute for copper and other metals, also in house, ship, and pier building.	2323	11th Oct. 1853	Henry Kemp.
Construction of railways - - - - (*Sleepers.*)	2595	8th Nov. 1853	George Shepherd.
XIV.—Switches, Points, and Crossings.			
Construction and arrangements of parts of railways (*Points or switches.*)	112	17th Jan. 1853	Alexander Yorston.
Construction and formation of granite and stone pavements and surfaces for carriage and rail ways. (*Junction-points.*)	267	31st Jan. 1853	Charles Hadley.
Construction of railways - - - - (*Points.*)	962	21st April 1853	Henry Carr.
Improvements in railways - - - (*Crossings.*)	1855	9th Aug. 1853	William Baines.
Manufacture of rails and parts of railways, and tires of railway-wheels.	1991	27th Aug. 1853	John Davie Morries Stirling.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
Permanent way of railways	2138	14th Sept. 1853	Thomas Swingler.
Railway-switches	2320	10th Oct. 1853	Richard Archibald Brooman.
Switches and crossings of railways	2512	31st Oct. 1853	Perceval Moses Parsons.
Improved railway-crossings as adapted to the double-headed rail and the ordinary rail and chair.	2719	22nd Nov. 1853	Benjamin Burleigh.
V.—Carriages; Connecting and Disconnecting Carriages; Preventing Engines and Carriages running off the Line.			
Railway-carriages	310	4th Feb. 1853	Jacob Vale Asbury.
Carriages used on railways	327	5th Feb. 1853	Edward Palmer.
Trucks, waggons, or vehicles for railway purposes	498	28th Feb. 1853	James Murphy.
Railway-carriages; connecting and disconnecting them.	499	28th Feb. 1853	Thomas Edward Merritt.
Preventing railway engines and carriages running off the rails.	615	10th March 1853	Emanuel Myers.
Improvements in carriages	727	26th March 1853	Alexander Prince.
Railway-carriages	729	26th March 1853	Charles de Bergue.
Railway-waggons	747	29th March 1853	Henry Lee Corlett.
Railway-carriages	758	29th March 1853	John Coope Haddan.
Propelling vessels and carriages;—parts of the machinery therein employed being also applicable to other like purposes. (*Connecting railway-carriages.*)	1172	12th May 1853	George Frederic Goble.
Means of preventing railway-carriages running off the rails.	1283	25th May 1853	Samuel Sanderson Hall.
Connecting together or coupling railway-carriages	1393	6th June 1853	Henry Wiglesworth.
Depositing metals or alloys of metals (*Bronzing metals for carriages.*)	1777	29th July 1853	William Edward Newton.
Retarding-apparatus for the prevention of accidents on railways. (*Coupling links.*)	2272	5th Oct. 1853	Alexander Turiff.
Construction of railway-carriages	2376	15th Oct. 1853	Frederick Samson Thomas.
Construction of railway-carriages whereby, in the event of collision, the crushing of the carriages will be prevented.	2501	29th Oct. 1853	Edwin Dalton Smith.
Connecting together or coupling railway-carriages	2584	7th Nov. 1853	Henry Wiglesworth.
Railway and other carriages and vehicles	2673	18th Nov. 1853	Perceval Moses Parsons.

See also "AXLES, &c."
"SPRINGS."
"WHEELS, &c."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
VI.—Buffers and Breaks; Retarding and Stopping Trains.			
Apparatus for retarding and stopping railway-carriages.	13	3rd Jan. 1853	Lazare François Vandelin.
Application of steam to the propulsion of carriages on common roads;—partly applicable to the construction of carriages for common roads.	53	8th Jan. 1853	Robert Lovely.
Mode of preventing accidents by improved signals on railways. (*Working the breaks.*)	225	29th Jan. 1853	William Archer.
Checking or stopping railway-trains of carriages, steadying the carriages when in motion, and preventing jerking and collision of the carriages.	249	31st Jan. 1853	Thomas Moreton Jones.
Railway-carriage break - - - - -	259	31st Jan. 1853	William Tizzie.
Railway-carriages - - - - - - (*Buffers.*)	310	4th Feb. 1853	Jacob Vale Asbury.
Carriages used on railways - - - - (*A drag.*)	327	5th Feb. 1853	Edward Palmer.
Means of retarding the progress of carriages -	340	9th Feb. 1853	Thomas Reynolds. Henry Reynolds. Stephen Reynolds.
Railway-breaks - - - - -	444	21st Feb. 1853	Ezra Miles.
Machinery or apparatus for retarding or stopping railway-trains;—also applicable as a signal or communication from one part of a train to another - - - - -	465	24th Feb. 1853	Henry Walmsley. Thomas Critchley.
Rolling and shaping malleable metals - - (*Applicable for buffer plates.*)	701	22nd March 1853	William Johnson.
An improvement or improvements in buffers -	704	22nd March 1853	Henry Henson Henson.
Working and increasing the safety of railways - (*Putting on breaks.*)	723	24th March 1853	Robert Walker.
A self-acting friction break to be applied to engines, carriages, and waggons used on railways.	746	29th March 1853	Samuel Newton.
Railway breaks and signals - - -	748	29th March 1853	Robert Heath.
Prevention of accidents on railways - -	873	12th April 1853	Alexander Turiff.
Improvements in the construction of locomotive-engines;—partly applicable to other engines.	888	13th April 1853	William Pearce.
Means for preventing accidents on railways -	898	13th April 1853	Moses Robinson.
Self-acting speed-regulator and safety-break for railway-carriages.	988	25th April 1853	Henry Elliot Hoole.
Means of retarding and stopping railway-trains -	994	25th April 1853	William Johnson.
Application of steam-power to the working of railway-breaks.	1256	21st May 1853	John Blair.
Central action buffers and spring guides for traversing rods.	1292	26th May 1853	William Racster, M.A.
Construction of springs for carriages and similar purposes. (*And buffers.*)	1294	26th May 1853	William Warcup.
Method of preventing collisions on railways -	1405	9th June 1853	George Bott. William Rushton.
Railway-breaks - - - - (*Communicated by Francis A. Stevens.*)	1440	14th June 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
Method of stopping railway-trains and preventing railway accidents.	1521	22nd June 1853	John Henry Noone.
Mode of equilibrating indefinitely the weight of atmospheres. (*Buffers.*)	1708	18th July 1853	Peter Armand le Comte de Fontainemoreau.
Preventing accidents on railways	1737	23rd July 1853	Auguste Buisson Lalande.
Apparatus for retarding and stopying railway-trains;—applicable to vehicles travelling on common roads	1757	26th July 1853	Thomas Banks. Henry Banks.
Apparatus for retarding and stopping trains of carriages on railways.	1807	2nd Aug. 1853	Mead Terry Raymond.
Obtaining motive-power (*Applicable for railway-breaks.*)	1868	11th Aug. 1853	Thomas Dewsnup.
Machinery or apparatus for operating the breaks of a train of railway-carriages	2101	10th Sept. 1853	Joseph Marks. John Howarth.
Modes or means of stopping or retarding vehicles used on railways.	2177	20th Sept. 1853	Henry Walker.
Railway-breaks	2231	29th Sept. 1853	François Julien Raux.
Retarding-ayparatus for the prevention of accidents on railways.	2272	5th Oct. 1853	Alexander Turiff.
Means of preventing accidents on railways	2285	6th Oct. 1853	Manuel Fernandez de Castro.
Retarding-apparatus for the prevention of accidents on railways.	2328	11th Oct. 1853	John Colin Sharp.
Apparatus for signalizing and stopping railway-trains.	2338	12th Oct. 1853	George Frederic Goble.
Construction of railway-carriages	2376	15th Oct. 1853	Frederick Samson Thomas.
An improved railway-break	2445	22nd Oct. 1853	Thomas Walker.
Mode and apparatus for preventing accidents on railways, including improvements in signalizing-apparatus.	2456	25th Oct. 1853	Christopher Richard Norris Palmer.
Apparatus for signalizing and stopping railway-trains.	2483	27th Oct. 1853	Thomas Seal Blackwell.
A new buffer-break for railway-carriages	2536	2nd Nov. 1853	Edwin Dalton Smith.
Construction and arrangement of the bufflug apparatus of railway-carriages; mode of applying the buffer and draw springs to such carriages.	2563	4th Nov. 1853	William Racster.
Retarding and stopping railway-trains and railway-carriages.	2650	16th Nov. 1853	John Ellerthorpe.
Railway breaks and signals	2732	24th Nov. 1853	David Chalmers.
Improved application of magneto-electricity for driving machinery and for neutralizing the impulsive force of machinery in motion. (*Working breaks.*)	2764	26th Nov. 1853	Joseph Scipion Rousselot.
Improvements in buffers for diminishing the shock in the collision of railway-trains.	2766	28th Nov. 1853	William Pritchard.
Means or apparatus for the prevention of accidents on railways in certain cases. (*Moveable break.*)	2847	8th Dec. 1853	Thomas Morau.
Construction of railway axles and breaks	2875	9th Dec. 1853	Henry Bessemer.
Method of applying breaks to carriages employed upon railways; machinery or apparatus connected therewith.	2886	12th Dec. 1853	Thomas Hollingsworth.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued*			
Preventing undue oscillations in engines, machinery, carriages, and other apparatus.	2892	13th Dec. 1853	Christian Schiele.
Retarding and stopping the progress of railway-carriages	2918	15th Dec. 1853	Arthur Benjamin Samuel Redford. Samuel Cloake.
Breaks for railway-carriages and other vehicles	2925	16th Dec. 1853	Thomas Seaville Truss.
Railway-breaks	2990	24th Dec. 1853	Joshua Margerison.
Improved railway-break	3006	28th Dec. 1853	Joseph Alexis.
For Railway-signals—*see* "SIGNALS, &c."			
RAISING SUNKEN VESSELS AND GOODS; DRAWING SHIPS OUT OF WATER; ASSISTING VESSELS IN DISTRESS.			
Applying the ascensional force of balloons to various useful purposes. (*For raising wrecks, bringing ships into port &c.*)	1088	4th May 1853	Jean Brando Gianetti.
Construction of vessels to be used chiefly at various depths under the surface of the water; machinery or apparatus connected therewith for propelling, balancing, and steering the same, and for carrying on operations of various kinds on or under the surface of the water, from within, upon objects without such vessels. (*Assisting vessels in distress.*)	1281	25th May 1853	William Bauer.
Apparatus for facilitating the raising, moving, and breaking up of sunken vessels and other submerged substances.	1571	29th June 1853	Pierre Amable de Saint Simon Sicard.
Raising or supporting heavy bodies for the better preservation of life and property. (*Communicated by Yelland Foreman.*)	2402	18th Oct. 1853	John Henry Johnson.
Apparatus for drawing ships out of water	2427	20th Oct. 1853	William Melville.
Surveying and raising sunken vessels; apparatus used therein; lifting vessels over bars and other obstructions.	2469	26th Oct. 1853	Edward Austin.
Apparatus for lifting and lowering ships and other heavy bodies, either submerged or otherwise.	2649	16th Nov. 1853	Peter Alexander Halkett.
READING.			
Apparatus for facilitating the acquirement of the art of reading. (*Communicated by Messrs. Nicolas Chéron and Florimond Nicolas Tallempin.*)	2074	9th Sept. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
REAPING, MOWING, RAKING.			
Machinery for mowing or cutting corn and other crops.	122	18th Jan. 1853	Frederick George Underhay.
Reaping all kinds of corn	171	24th Jan. 1853	Henry Brinsmead.
Instruments for cutting vegetable matters (*Growing crops.*)	399	15th Feb. 1853	Henry Francis.
Reaping or cutting crops	422	17th Feb. 1853	Isaac Frost.
A new machine with its adjuncts or other apparatus to be used for agricultural purposes. (*Raking.*)	497	28th Feb. 1853	Theodore Baron Von Gilgenheimb.
Reaping-machinery	527	2nd March 1853	Willoughby Theobald Monzani.
Machinery for cutting standing crops and gathering the same into sheaves or bundles.	624	12th March 1853	Auguste Edouard Loradoux Bellford.
Improved reaping-engine	954	20th April 1853	Thomas Cooke Foster.
Reaping and gathering machinery	956	20th April 1853	Richard Archibald Brooman.
Agricultural reaping-machine	991	25th April 1853	Robert Davies.
Reaping and mowing machines	1006	27th April 1853	Frederick George Underhay.
Machinery for mowing	1048	29th April 1853	John Kealy.
Reaping and mowing machinery	1058	2nd May 1853	John Filmore Kingston.
Machinery or apparatus for effecting agricultural operations.	1151	10th May 1853	John Henry Johnson.
Machine for cutting and reaping corn, corn crops, and other plants.	1156	11th May 1853	Marie Pierre Ferdinand Mazier.
Machinery for cutting and harvesting corn, grass, and other crops.	1349	2nd June 1853	Joseph Whitworth.
Reaping-machine	1518	21st June 1853	John Drummond.
Machines for reaping and mowing corn, grass, and other crops.	1587	29th June 1853	John Patterson.
A reaping-machine	1787	1st Aug. 1853	Henry Cadell.
Cutting, reaping, and gathering machines	1792	1st Aug. 1853	James Pudney Tracey. John Hart Tracey.
Reaping-machinery	1799	1st Aug. 1853	Henry Purser Vaile.
Machinery or apparatus for mowing, reaping, or other similar purposes.	1931	18th Aug. 1853	David Harkes.
Machinery for reaping and gathering corn, grain, and other agricultural produce.	2020	31st Aug. 1853	William Edward Newton.
Reaping and gathering machines	2048	6th Sept. 1853	Lemuel Wellman Wright.
Reaping, gathering, and binding machine	2206	24th Sept. 1853	Charles Edward Austin.
Improvements in scythes	2208	26th Sept. 1853	James Smith.
Reaping-machines	2824	5th Dec. 1853	John Patterson.
RETORTS AND CRUCIBLES.			
Apparatus for distillation of resin oil, and for an improved method of bleaching and deodorizing the same during the process of manufacture. (*Retorts.*)	483	25th Feb. 1853	Frederick Goodell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RETORTS, &c.—*continued.*			
Apparatus for the manufacture of gas and coke - (*Retorts.*)	820	5th April 1853	John Thomas.
Treatment of ores and other substances containing metals to obtain products therefrom; apparatus used therein.	912	14th April 1853	David Zenner.
Manufacture and purification of gas for illumination and certain products therefrom, and apparatus for that purpose. (*Doors of retorts.*)	924	16th April 1853	Jean Marie Souchon.
Application of retorts in gas ovens or other ovens, and of gas ovens or other ovens which are constructed as retorts, to the process of improving iron and converting iron into steel.	929	18th April 1853	William Walker Stephens.
Casting metals and moulding or forming other materials. (*Crucibles.*)	995	25th April 1853	Julian Bernard.
Manufacture of white oxyde of zinc - - (*Retorts.*)	998	26th April 1853	George Kennedy Geyelin.
Apparatus for manufacturing chlorine or chlorides	1359	2nd June 1853	William Boyd.
Manufacture of glass-house pots - - -	1486	18th June 1853	Edgar Breffit.
Burning and re-burning animal charcoal - - (*Retorts.*)	2011	30th Aug. 1853	James Picciotto.
Mode of manufacturing the combustible gases resulting from the decomposition of water or steam; construction of apparatus connected therewith. (*Retorts.*)	2561	4th Nov. 1853	William Gilbert Ginty.
Apparatus for the production of carburretted hydrogen gas. (*Retorts.*)	2702	21st Nov. 1853	Sir John Scott Lillie.
Apparatus for subjecting substances to the action of heat, for carbonizing, calcining, or combining such substances, or for subjecting such substances to the process of distillation.	2827	5th Dec. 1853	Edward Lavender.
Retorts for the manufacture of gas - -	2905	15th Dec. 1853	Eugène Hippolyte Rascol.
ROPES OR CORDAGE, AND OAKUM.			
Roving, spinning, or twisting cotton or other fibrous substances—"Larwill's improvements."	38	6th Jan. 1853	William Edward Newton.
Manufacture of ropes, bands, straps, and cords -	449	21st Feb. 1853	William Wilkinson.
Ropes, cords, lines, twines, and mill-bandings -	917	15th April 1853	William Wilkinson.
Manufacture of oakum - - - -	1297	26th May 1853	Theophilus Westhorp.
Method of making and laying down submarine and other telegraph cables, applicable for the making of ropes and cables generally.	1312	28th May 1853	William Smith.
Manufacture of yarn and fabricating articles therefrom. (*From Lygeum Spartum.*)	1451	15th June 1853	Jules Dehau.
Manufacture of cordage, ropes, &c. by the application of a material not hitherto used in Great Britain for such purposes. (*Stipa tenacissima.*)	1452	15th June 1853	Jules Dehau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ROPES, &c.—*continued.*			
Separating the refuse vegetable matter contained in the stalk and leaves of the plantain species, and also trees grown in tropical climates, from the fibrous material of the same, in order that the latter may be manufactured into ropes or cordage, and for other purposes for which hemp and flax are used.	1723	21st July 1853	John Lilley.
Application of the fibrous part of the palm tree and leaf to arts and manufactures.	2089	10th Sept. 1853	Arthur Warner.
For Trying the Strength of Ropes—*see* "TESTING, &c."			
RULING.			
Machinery or apparatus for marking, ruling, or ornamenting surfaces.	1015	27th April 1853	William Johnson.
Ruling ornamental figures - - -	2639	14th Nov. 1853	William Smith.
SAFES AND TILLS.			
Improvements in tills - - - - -	50	7th Jan. 1853	Richard Gittins.
Means for preventing the fraudulent abstraction of property. (*Safes and vaults.*)	2587	7th Nov. 1853	Alfred Vincent Newton.
SALT.			
Precipitating the muriate of soda from its solutions in water.	1115	6th May 1853	Augustus Brackenbury.
Manufacture of salt - - - - -	2982	23rd Dec. 1853	John Gillow, junior.
SCENTS, ESSENCES, POMADES.			
Manufacture and application of certain extracts obtained from the elder-tree. (*For mixing with pomades.*)	484	26th Feb. 1853	Charles Napoleon Wilcox.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids. (*For making essences.*)	1363	3rd June 1853	Ferdinand Louis Gossart.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SCENTS, &c.—*continued.*			
Mode of making with iodine and its compounds, in combination with substances containing extractive principles, various elementary combinations. (*Pomatum.*)	1487	18th June 1853	Jacques François Dupont de Bussac.
Preparation of glycerine, and its applications - (*To cosmetics, pomades &c.*) (*Communicated by Victor Courbalay.*)	1655	12th July 1853	John Henry Johnson.
SCREENS.			
Ornamenting walls, ceilings, and other surfaces -	144	20th Jan. 1853	William Riddle.
Decoration of furniture panels and other surfaces -	882	12th April 1853	Eliza Cunnington.
Manufacture of porcelain and like wares - - (*Moulding screens.*)	1004	26th April 1853	Moses Poole.
Manufacture of blinds, shades, and other vitreous substances; method or methods of raising, lowering, folding, and regulating such blinds, shades, and other screens.	1392	6th June 1853	Delabere Barker.
SCREWS, SCREW-BLANKS, NUTS.			
Machinery for shaping metals - - -	82	12th Jan. 1853	John Arrowsmith.
Manufacturing screws, bolts, and other similar articles; machinery or apparatus used for such manufacture, partly applicable for forming screw-threads, &c.	698	22nd March 1853	Samuel M'Cormick.
Nails and other fastenings; machinery or apparatus employed in the manufacture thereof. (*Set screws, bolts, &c.*)	819	5th April 1853	Thomas Carr.
Machinery for manufacturing screws - -	1076	3rd May 1853	Severin Virgile Bonneterre.
Improvements in turning-lathes;—partly applicable to other useful purposes.	1410	9th June 1853	William Muir.
Machinery for making screw-blanks, &c. - -	1456	15th June 1853	John Elliott. John Brown.
Improvements in ship-building - - - (*Wood trenails with screw-threads.*)	1482	18th June 1853	William Hall.
Improvements in lathes - - - - (*For cutting screws.*)	2204	24th Sept. 1853	Alexander Dalgety.
Machinery or apparatus for manufacturing or forging iron or other metals into screw-bolts, nuts, or other similar articles.	2356	13th Oct. 1853	William Robinson.
Machinery for stamping and cutting metal nuts and other similar metal articles.	2841	7th Dec. 1853	Lewis Harvey Bates.
Manufacture of screws - - - -	3022	29th Dec. 1853	Alfred Vincent Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SEWERS, GUTTERS, STREET-DRAINS.			
I.—Making or Building.			
Method of draining dwelling-houses and other buildings, and open and enclosed spaces in cities and towns where sewers and drains are now or may be hereafter constructed.	370	12th Feb. 1853	John Fordham Stanford.
Method of pavement tending to secure the evenness of the road and proper adhesion to the foot. (*Forming drains.*)	1463	16th June 1853	James William Gibson.
Ship-building - - - - - - (*Forming gutters.*)	1585	1st July 1853	John Getty.
Method of draining dwelling-houses and open and enclosed spaces in cities and towns where sewers and drains are now or may be hereafter constructed.	1770	28th July 1853	John Fordham Stanford.
Construction of sewers, drains, channels, and other like conduits for hydraulic or pneumatic purposes.	1854	9th Aug. 1853	Louis Hartog Bruck.
Mode of protecting iron of every kind against the action of the weather, of rain, river, spring, and sea water, so that iron thus protected may be used for gutters and various other purposes.	2215	27th Sept. 1853	Nicholas Callan.
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for gutters &c.	2340	12th Oct. 1853	Nicholas Callan.
Construction of roads, ways, and ducts - - (*Channels for drains.*)	2976	22nd Dec. 1853	William Henry Woodhouse.
II.—Cleansing and Disinfecting; Preventing Effluvium from.			
A new machine with its adjuncts, or other apparatus, to be used for agricultural purposes. (*Cleaning gutters and ditches.*)	497	28th Feb. 1853	Theodore Baron Von Gilgenheimb.
Deodorizing cesspools &c. - - - -	581	8th March 1853	Jacques Francisque Pinel.
Fittings of bilge pumps and injection cocks of iron steamers and sailing vessels. (*Applying and cleansing drains.*)	913	14th April 1853	Alexander Crichton.
Disinfecting sewers and other drains; converting the contents thereof to useful purposes.	1511	20th June 1853	Allan Macpherson.
A self-acting flushing-apparatus applicable to sanitary purposes.	2513	31st Oct. 1853	John Gray.
Apparatus for trapping passages into sewers or drains.	2629	12th Nov. 1853	William Austin.
Construction and arrangement of apparatus employed in connection with sewers. (*Cover and stench-trap.*)	2825	5th Dec. 1853	Thomas Storey.
Disinfecting sewers or other drains or depositories of fetid matters or gases; converting the contents thereof to useful purposes.	2876	10th Dec. 1853	Allan Macpherson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SEWING AND EMBROIDERING.			
An improved sewing-machine	124	18th Jan. 1853	Alfred Vincent Newton.
Sewing-machine	398	15th Feb. 1853	Henry Dircks.
Garments; sewing or uniting the seams of the same.	869	11th April 1853	Donald Nicoll.
Sewing cloth, leather, and other materials	966	21st April 1853	William H. Johnson.
Apparatus for sewing or stitching	1026	27th April 1853	William Frederick Thomas.
Machinery or apparatus for sewing (*Communicated by William Wickersham.*)	1150	10th May 1853	William Johnson.
Improvements in sewing-machines	1185	13th May 1853	Robert Smith Bartleet.
Manufacture of sewing-machine needles	1676	14th July 1853	Robert Smith Bartleet.
The adaptation of loom machinery to the purposes of embroidery for badges worn by the police, railway officials, and other officers, which require a succession of figures	1713	19th July 1853	Richard Dart. Edward Silverwood.
Apparatus used in sewing	1894	12th Aug. 1853	Robert Smith Bartleet.
Machinery for stitching, back-stitching, and running.	1910	15th Aug. 1853	Archibald Douglass.
Sewing sails and other articles	2095	10th Sept. 1853	Thomas William Gilbert.
Improvements in sewing-machines (*Communicated by Mesdames Adrienne Elisabeth Figuier and Euphrasie Chérault.*)	2131	14th Sept. 1853	John Henry Johnson.
Method of forming seams and ornamental stitching; machinery for effecting such operation, part of which machinery is applicable to the forming of other seams and stitches.	2187	21st Sept. 1853	Alfred Vincent Newton.
Machinery or apparatus for sewing or stitching	2473	26th Oct. 1853	Edward Joseph Hughes.
Improvements in ornamental fabrics—"Ayrshire sewed work"	2638	14th Nov. 1853	William Anderson, junior. Alexander Wark Murphy.
Machinery for sewing cloth or other material (*Communicated by William Butterfield.*)	2738	24th Nov. 1853	Elmer Townsend.
Mode of producing plain and ornamental sewing; machinery applicable thereto.	2790	30th Nov. 1853	Lewis Jennings.
Machinery or apparatus for stitching or uniting and ornamenting various materials.	2837	6th Dec. 1853	Julian Bernard.
Sewing-machines	2996	27th Dec. 1853	Edward Joseph Hughes.
Stitching and ornamenting various materials; machinery and apparatus connected therewith.	3039	31st Dec. 1853	Julian Bernard.
SHEARING SHEEP, CLIPPING HORSES.			
Instruments for cutting wool, hair, and vegetable matters.	399	15th Feb. 1853	Henry Francis.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIP AND BOAT BUILDING AND CLEANING.			
Construction of ships or other navigable vessels; machinery or apparatus connected therewith.	33	6th Jan. 1853	John Browne.
Certain apparatus and arrangements applicable to steamboats and other navigable vessels, for the purpose of preventing sea sickness. *See* "FURNITURE."	143	20th Jan. 1853	Horace de Manara.
Cement for resisting moisture and damp - - (*Applicable for calking.*)	190	25th Jan. 1853	Joseph Wiggins.
A twin-stern ship or vessel with a protected propeller	204	27th Jan. 1853	Alfred Barnes Sturdee.
Constructing ships and vessels propelled by screw or such like propeller.	219	28th Jan. 1853	John Scott Russell.
Combining metal plates for ship building and other engineering constructions.	235	29th Jan. 1853	Henry Batchelor.
Means of ballasting ships or vessels and rendering them buoyant under certain circumstances.	252	31st Jan. 1853	Edwin Pugh.
Life-boats and vessels of a similar nature - -	281	2nd Feb. 1853	Auguste Edouard Loradoux Bellford.
Ships' side-lights, scuttles, or ports - -	397	15th Feb. 1853	Joseph Ridsdale. Alfred Ridsdale.
An improved bath, which can also be used as a life-boat.	446	21st Feb. 1853	Benjamin Barton.
Construction of certain floating vessels and mode of propelling them - - - - -	556	5th March 1853	Baldwin Fulford Weatherdon. Charles Dealtry.
Life-boats - - - - - -	563	7th March 1853	William Barrington.
Self-acting plug for barges, boats, and other vessels	724	26th March 1853	Erasmus Symonds.
Construction of ships and vessels - - -	742	29th March 1853	Samuel Bayliss.
Construction of metallic beams or bracings and metallic sheets or plates, applicable to the building of ships and other structures where lightness and strength are required.	827	6th April 1853	William Radford.
Constructing and mooring light vessels, buoys, and other similar floating bodies.	852	8th April 1853	George Herbert.
Construction of ships and boats - - -	1132	7th May 1853	Alexander Chaplin.
Rafting timber and other goods - - -	1162	11th May 1953	Thomas Powditch Jordeson.
Improvements in ship-building - - -	1249	20th May 1853	Samuel Schollick.
Navigable vessels to be employed in all waters, and to be propelled or impelled by sails, steam-power, or other means.	1262	21st May 1853	Auguste Edouard Loradoux Bellford.
Construction of vessels to be used chiefly at various depths under the surface of the water; machinery or apparatus connected therewith for propelling, balancing, and steering the same, and for carrying on operations of various kinds on or under the surface of the water, from within, upon objects without such vessels.	1281	25th May 1853	William Bauer.
Construction of ships and boats - - -	1396	7th June 1853	Frederick Lipscombe.
Construction of iron ships - - -	1423	10th June 1853	Joseph Westwood. Robert Baillie.
Construction of ships, vessels, or boats - -	1432	13th June 1853	John Buchanan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIP AND BOAT BUILDING, &c.—*continued.*			
Construction of steamboats - - -	1434	13th June 1853	Gonsal Auguste Hiacinthe Justin Fremin.
Manufacture of sheet iron and iron plates used for vessels and other like purposes.	1449	15th June 1853	Charles Wye Williams.
Construction of portable boats or vessels and buoys	1450	15th June 1853	John Mackintosh.
Construction of barges and vessels; mode of steering.	1460	16th June 1853	William Henry Grey Field.
Improvements in ship-building - - -	1482	18th June 1853	William Hall.
Formation of such metallic plates as are required to be conjoined by rivetting or other suitable fastening. (*For ship-building.*)	1529	23rd June 1853	James Burrows.
Ship-building - - - - -	1585	1st July 1853	John Getty.
Ships' ports or scuttles - - - -	1649	11th July 1853	Henry Brougham Hopwood.
Constructing iron ships, boats, and other metallic structures.	1656	12th July 1853	Andrew Burns.
Safety-apparatus for the protection and preservation of life on water.	1711	19th July 1853	Donald Brims.
Constructing floating bodies - - -	1743	25th July 1853	Joseph Aristide Furst De Rostin.
Depositing metals or alloys of metals - - (*For preserving metal used in ship-building.*)	1777	29th July 1853	William Edward Newton.
Manufacture of a composition resembling papier-mâché and carton-pierre, partly applicable to the construction of ships and boats &c.	1804	2nd Aug. 1853	William Henry Clarke.
Canal and river navigation; vessels used in such navigation; mode of propelling the same.	1820	3rd Aug. 1853	William Hickson.
Construction of ships and vessels - - -	1862	10th Aug. 1853	Thomas MacSweny.
Construction of ships and other vessels - -	1929	18th Aug. 1853	Robert Clough.
Construction of iron vessels, masts, spars, and other like structures or articles.	2042	5th Sept. 1853	John Clare, junior.
Strengthening vessels of timber and iron - -	2163	17th Sept. 1853	Arthur John Baker.
Propelling ships and vessels - - -	2247	1st Oct. 1853	Jean Marie Letestu.
Certain improvements in ship-building - -	2254	3rd Oct. 1853	John Wyncoll Baxter.
Preparation of wood for ship-building &c. - -	2323	11th Oct. 1853	Henry Kemp.
Apparatus for cleaning ships &c. - - -	2344	12th Oct. 1853	Robert William Waithman.
Building ships and other vessels - - -	2362	13th Oct. 1853	Thomas Grahame.
Improvements in life-rafts - - -	2592	8th Nov. 1853	George Frederick Parratt.
Manufacture of bar and sheet metals; machinery connected therewith; application of such metals to various useful purposes.	2662	17th Nov. 1853	John Clark, junior.
Improvements applicable to the plating of iron ships (*Template.*)	2843	7th Dec. 1853	John Getty.
Machinery for the production of iron ships and other similar structures.	2873	9th Dec. 1853	John Bourne.
Construction of iron ships - - -	2874	9th Dec. 1853	John Bourne.
Formation of such metallic plates as are required to be conjoined by rivetting or other similar fastening. (*For ships.*)	2962	20th Dec. 1853	James Burrows.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIP AND BOAT BUILDING, &c.—*continued.*			
Setting out and marking the rivet-holes in the plates used in constructing iron ships, boats, and other vessels. (*Template.*)	2964	20th Dec. 1853	Archibald Thomson.
SHIPS (*Ballasting, Mooring, Loading, Unloading*).			
Means of ballasting ships or vessels, and rendering them buoyant under certain circumstances.	252	31st Jan. 1853	Edwin Pugh.
Construction of certain floating vessels and mode of propelling them - - - - (*With provision for taking in water ballast.*)	556	5th March 1853	Baldwin Fulford Weatherdon. Charles Dealtry.
Machinery for loading and unloading colliers and other ships and vessels.	839	7th April 1853	Robert Pattison Clark.
Constructing and mooring light vessels, buoys, and other similar floating bodies.	852	8th April 1853	George Herbert.
Machinery or apparatus for stopping cables - -	1751	25th July 1853	William Edward Newton.
Supplying ships or other vessels with water, air, or ballast.	1808	2nd Aug. 1853	Matthias Edward Boura.
SHIPS' BOATS (*Lowering, Disengaging, Raising*).			
Apparatus for detaching boats or other floating vessels from their moorings or fastenings.	425	18th Feb. 1853	Charles Butler Clough.
Suspension and management of ships' boats -	807	4th April 1853	John Lawson.
Apparatus for lowering boats evenly and preventing them filling with water.	895	13th April 1853	Charles Clifford.
Disengagnig boats from ships or other vessels -	1170	11th May 1853	Abraham Matthews,
Apparatus for disengaging, lowering, and raising ships' boats.	1190	14th May 1853	George Fitzjames Russell.
Raising and lowering ships' boats; apparatus connected therewith.	1328	30th May 1853	Francis William Wymer.
Apparatus for lowering ships' boats and for holding and letting go tackle.	1631	8th July 1853	Stephen Martin Saxby.
SHIPS' MASTS, GAFFS, AND BOOMS.			
Strengthening the masts of ships and vessels -	673	18th March 1853	Charles Harratt.
Yards and spars of ships and other vessels - -	771	31st March 1853	Joseph Rylands.
Construction of ships' masts, yards, booms, and spars.	772	31st March 1853	Robert M'Gavin.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIPS' MASTS, &c.—*continued.*			
Yards and spars of ships and other vessels - - (*Communicated by Joseph Rylands.*)	1734	22nd July 1853	Mary Ann Rylands.
Masts and rigging of ships - - - -	1914	16th Aug. 1853	Edward Finch. Charles Lamport.
Construction of iron masts, spars, and other like structures or articles.	2042	5th Sept. 1853	John Clare, junior.
Ships' jack-stays for masts, and gaffs for fore and aft sails.	2399	18th Oct. 1853	George Louis Stocks.
SHIPS' SAILS, RIGGING AND BLOCKS.			
Sail-hanks for securing staysails, jibs and other sails, to their proper stays.	334	7th Feb. 1853	Richard Archibald Brooman.
Certain kinds of sails - - - -	617	11th March 1853	James Summers.
Block-making machinery - - - -	710	23rd March 1853	William Mann Crossland.
Method of setting up and adjusting ships' rigging of all tonnage.	814	5th April 1853	James Long.
Construction of ships' square sails; methods of reefing the same - - - - -	1526	23rd June 1853	George Louis Stocks. Thomas Watson.
Masts and rigging of ships - - -	1914	16th Aug. 1853	Edward Finch. Charles Lamport.
New description of cloth or fabric applicable to most purposes to which woven and knitted fabrics are applied - - - - -	1996	27th Aug. 1853	Edward Lacey. William Wilkinson.
Sewing sails and other articles - - -	2095	10th Sept. 1853	Thomas William Gilbert.
Formation and arrangement of and mode of rigging and working the sails of yachts, ships, and other vessels.	2266	4th Oct. 1853	Joseph Thomas Dodge.
Blocks for ships and other uses - - -	2802	2nd Dec. 1853	Auguste Edouard Loradoux Bellford.
SHIRTS AND COLLARS; DRESSES AND UNDER-GARMENTS.			
Manufacture of shirts - - - -	1355	2nd June 1853	Antoine Remi Cyr Madoré. Daniel Newburger.
Manufacture of cotton fabrics for ladies' under-dresses.	1560	28th June 1853	Alexander Brown.
Manufacture of woven or textile fabrics - -	1611	6th July 1853	William Woods Cook.
Improvements in ornamental fabrics—"Ayrshire sewed work" - - - - - (*For habit-shirts, collars, and sleeves.*)	2638	14th Nov. 1853	William Anderson, junior. Alexander Wark Murphy.
Manufacture of certain articles for ladies' under-clothing, and fabrics for the same. (*Petticoats and chemises.*)	2773	28th Nov. 1853	James Lord.
Manufacturing, ornamenting, and applying fabrics for articles of clothing; application of certain fabrics to such purposes; producing shapes for articles of clothing. (*Ladies' dresses &c.*)	3024	30th Dec. 1853	James Lord.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHOT, SHELL, AND OTHER PROJECTILES.			
An appendage to bullet-moulds - - -	47	7th Jan. 1853	Charles William Lancaster.
Machinery for shaping metals - - - (*For making shot.*)	82	12th Jan. 1853	John Arrowsmith.
Projectile - - - - - - -	86	12th Jan. 1853	Edward Haslewood.
Application of explosive compounds - - (*As shells.*)	306	4th Feb. 1853	George Winiwarter.
Gunnery and projectiles (with pouch for the latter) adapted for muskets, rifles, pistols, and heavy cannon for field-pieces or forts, batteries, ships of war and other vessels.	591	8th March 1853	John James Alexander Maccarthy.
Projectiles for cannon and fire-arms - -	1033	28th April 1853	William Hurt Sitwell.
Balls, cartridges, and explosive compounds - -	1447	15th June 1853	Charles Evan Reeves.
Certain improvements in fire-arms; bullets and waddings to be used therewith.	2921	16th Dec. 1853	William Tranter.
SIGNALS, ALARMS, COMMUNICATING APPARATUS.			
Apparatus to be used in connection with railway-signals for the purpose of indicating the approach of trains and of preventing collisions.	25	5th Jan. 1853	Charles Frederick Whitworth.
Illuminating buoys and beacons in harbours, roadsteads, and rivers.	31	6th Jan. 1853	William Louis Sheringham.
Obtaining communication between guards, passengers, and drivers on railways.	56	8th Jan. 1853	Henry Kimble.
Construction of certain parts of apparatus connected with railway-signals; mode or method of working the same.	104	15th Jan. 1853	William Bailey.
Construction and arrangements of parts of railways (*Signal apparatus.*)	112	17th Jan. 1853	Alexander Yorston.
Signalising on railways; apparatus used therein -	117	17th Jan. 1853	Henry Henson Henson. William Frederick Henson.
Apparatus for giving signals on railways - -	130	19th Jan. 1853	Sydney Smirke.
Keeping up a communication between the guards and engine-driver, and between the guards and passengers, by means of a lamp-signal, which answers both for a day and night signal for a railway-train.	150	21st Jan. 1853	John Addison.
Signalizing or conveying alarm and other signals between one part and another of a train of railway-carriages.	165	22nd Jan. 1853	William Daniel Steevens.
Method of communicating between the guard and driver of a railway-train - - - (*Speaking-tube.*)	172	24th Jan. 1853	Howard Ashton Holden. Edward Bull. Alfred Knight.
Method of communicating signals from one part of a railway-train to another.	181	24th Jan. 1853	Andrew Edmund Brae.
Means of communicating signals on railways and for other purposes.	207	27th Jan. 1853	Edward Jones Biven.
Communicating between the guard and driver of a railway-train; apparatus employed therein.	220	28th Jan. 1853	Rowland Speed.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIGNALS, &c.—*continued.*			
Mode of preventing accidents by improved signals on railways;—partly applicable to blast-furnaces.	225	29th Jan. 1853	William Archer.
Signalling by electricity on railway-trains and railways; appliances used therein.	303	4th Feb. 1853	David Lloyd Price.
Means of communication between the passengers, guard, and driver of a railway-train; partly applicable to communicating on vessels.	378	12th Feb. 1853	Charles Hadley.
Machinery or apparatus applicable as a signal or communication from one part of a train to another	465	24th Feb. 1853	Henry Walmsley. Thomas Critchley.
Making communications between the guards and engine-drivers on railway-carriages.	495	26th Feb. 1853	Samuel Varley.
Improvements in communicating and giving signals between the engine-drivers and guards on railway-trains, being in connection with a mode already patented for effecting the same object	518	2nd March 1853	Howard Ashton Holden. Alfred Knight. Edward Bull. John Bamfield.
Apparatus for facilitating communications between the guard and engine-man of railway-trains.	614	10th March 1853	James Stevens.
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electrolytic action. (*Electric tell-tale or alarm.*)	634	14th March 1853	William Edwards Staite.
Method of transmitting communications from one part of a railway-train to another.	681	19th March 1853	Joseph Haley.
Apparatus for communicating between the guard and engine-driver or other persons in a railway-train.	694	21st March 1853	John Barsham.
Improvements in signals	699	22nd March 1853	Thomas Bouch.
Working and increasing the safety of railways (*Laying and working signal-wires.*)	723	24th March 1853	Robert Walker.
Railway breaks and signals	748	29th March 1853	Robert Heath.
Telegraphing or communicating signals	822	6th April 1853	Edward Simons.
Signal-posts for railways; apparatus connected therewith	861	11th April 1853	John Fuller Boake. John Reily.
Signal-apparatus for railways	877	12th April 1853	Downes Edwardes.
Means for preventing accidents on railways (*Arranging whistles.*)	898	13th April 1853	Moses Robinson.
Mode of communicating or signalling between the guards and engine-drivers on a railway-train;—also applicable to other purposes.	1126	7th May 1853	Christopher Richard Norris Palmer.
Electric telegraph apparatus	1155	11th May 1853	Jacob Brett.
Means of communicating between guards or persons and the engine-driver of a railway-train.	1165	11th May 1853	Alfred Bird.
Communicating intelligence	1235	18th May 1853	Job Allen.
Locks and keys;—partly applicable to window-sashes and doors. (*Combining with signals.*)	1310	27th May 1853	William Henry Bentley.
Improvements in and applicable to lamps; also applicable to apparatus for lighthouse signal purposes;—partly applicable for other useful purposes.	1327	30th May 1853	John Macdonald.
Horological alarms	1457	15th June 1853	Timoléon Zoé Louis Maurel.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIGNALS, &c.—*continued.*			
Apparatus for making tea and coffee, and other infusions or decoctions for chemical and other purposes. (*With a signal-tube.*)	1715	20th July 1853	John Robison.
Effecting communications between different points -	1727	21st July 1853	The Reverend Alleyne Higgs Barker.
Apparatus for ascertaining and indicating the supply of water in steam-boilers.	1747	25th July 1853	Robert Bitten.
Electro-magnetic alarm apparatus to be applied to a door or window, or both, of a dwelling-house or other building, for the purpose of giving an alarm in case of an attempt to open such door or window.	1795	1st Aug. 1853	Augustus Russell Pope.
Lamps; lanterns used therewith - - -	1883	12th Aug. 1853	Read Holliday.
Railway-signals; means of preventing accidents upon railways; apparatus connected therewith.	1918	16th Aug. 1853	George Richardson.
Steam-boilers; apparatus applicable thereto and to be used therewith - - - - -	2029	2nd Sept. 1853	John Tayler. James Griffiths. Thomas Lees.
Mechanical telegraphs - - - - (*For ships.*)	2153	16th Sept. 1853	William Shelbourne Icely.
Signalling or communicating intelligence - -	2155	16th Sept. 1853	William Carron.
Railway-signals - - - - - -	2161	16th Sept. 1853	Baldwin Fulford Weatherdon. Matthew Slade Hooper.
Railway-train signal, communicating between the guard and engine-driver.	2189	22nd Sept. 1853	Thomas Smedley.
Means of conveying signals or intelligence from one part of a railway-train to another.	2202	24th Sept. 1853	James Grafton Jones.
Alarms and signals to be used in or on railways, ships, houses, buildings, plantations, or other places, for the purpose of giving audible or visible signal in cases of danger or alarm.	2212	26th Sept. 1853	William Adolphus Biddell.
Means of preventing accidents on railways - -	2285	6th Oct. 1853	Manuel Fernandez de Castro.
Giving signals on railways - - - - -	2337	11th Oct. 1853	Bernard Cowvan.
Apparatus for signalizing and stopping railway-trains.	2338	12th Oct. 1853	George Frederic Goble.
An invention for electric telegraph purposes, being an improved signal electric telegraph, with electric alarm attached - - - - -	2345	12th Oct. 1853	Henry Mapple. Daniel Moore Mapple.
Means of preventing accidents on railways -	2383	15th Oct. 1853	John Peary.
Method of communicating between the guard and driver of a railway-train.	2398	18th Oct. 1853	George Price.
Apparatus for avoiding collisions of trains on railways.	2403	18th Oct. 1853	Cornelius Nicholson.
Means of communication between guards, engine-drivers, or passengers in or on railway-trains -	2439	21st Oct. 1853	Henry Cook. Augustus Cook.
Improved safety apparatus, and method or means of signalling to be used on railways in cases of danger or emergency.	2444	22nd Oct. 1853	Thomas Connell.
Mode and apparatus for preventing accidents on railways, including improvements in signalizing apparatus.	2456	25th Oct. 1853	Christopher Richard Norris Palmer.
Improvements in signal apparatus for railways -	2475	26th Oct. 1853	Downes Edwards.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIGNALS, &c.—*continued.*			
Apparatus for signalizing and stopping railway trains	2483	27th Oct. 1853	Thomas Seal Blackwell.
Apparatus for indicating water in the holds of vessels	2484	27th Oct. 1853	Richards Richards.
System or arrangement for preventing collisions or accidents on railways.	2539	2nd Nov. 1853	William Maltby.
Signal apparatus for the prevention of accidents on railways.	2586	7th Nov. 1853	Thomas Walker.
Preventing accidents on railways, also in shifting and lifting railway-carriages.	2606	10th Nov. 1853	Peter Armand le Comte de Fontainemoreau.
Means of communication from one part of a railway-train to another.	2611	11th Nov. 1853	Henry Walker.
Means or method of communicating between different parts of a railway train.	2640	14th Nov. 1853	Michael Fitzgerald.
Communicating from one part of a railway train to another.	2658	16th Nov. 1853	William Frederick Greenfield.
Method of signalling or communicating between trains on railways - - - - -	2663	17th Nov. 1853	George Dugmore. George Haywood Millward.
Communicating information or directions to persons in charge of railway-trains - - -	2664	17th Nov. 1853	Solomon Abraham. Samuel Victor Abraham.
Double-acting railway-signal for preventing collisions or accidents on railways.	2666	17th Nov. 1853	John Banfield.
Apparatus to be applied to a railway truck or carriage to enable a guard or person to sound a whistle, and when necessary, to put such truck or carriage in motion, independent of the locomotive-engine.	2692	19th Nov. 1853	Ellis Rowland.
Mode of communicating from vessels to the shore, or from one vessel to another.	2703	21st Nov. 1853	Robert Jamieson Sibbald.
Mode of communicating signals on railways -	2705	21st Nov. 1853	John Cashmore.
An indicator alarm applicable to railways and railway-trains.	2708	22nd Nov. 1853	William Greaves.
Apparatus to be employed for the purpose of communicating signals on railway-trains and railways;—applicable to other similar purposes. (*Also for ships.*)	2711	22nd Nov. 1853	Alfred Bird.
Railway breaks and signals - - -	2732	24th Nov. 1853	David Chalmers.
Signalling to prevent collisions on railways -	2770	28th Nov. 1853	William Littel Tizard.
Improved signalling apparatus - - -	2781	30th Nov. 1853	Joshua Jackson.
"Alarm-whistles" to be used upon railways, or as signals where otherwise required - - -	2797	1st Dec. 1853	Thomas Hollingsworth. John Hollingsworth.
Electric telegraphs - - - - (*Actuating signals.*)	2846	8th Dec. 1853	William Thomas Henley.
Apparatus for communicating between the engine-driver and the guard of railway-trains.	2926	16th Dec. 1853	Thomas Seaville Truss.
Means of preventing accidents upon railways -	2944	17th Dec. 1853	Matthew Parsons Houghton. Andrew Stewart.
Signalling and preventing collisions on railways by electrical communication.	2967	21st Dec. 1853	Charles James Farrington.
Lamp for signalling - - - -	2977	22nd Dec. 1853	Charles Lewis.
Means of communication between the guard and the engine-driver in a railway-train.	3003	28th Dec. 1853	John Moffat.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SINKS.			
Certain improvements in kitchen sinks -	1079	3rd May 1853	Thomas Chambers. John Chambers.
Certain improvements in kitchen sinks -	2763	26th Nov. 1853	Thomas Chambers. John Chambers.
SIZING, PREPARING, WARPING, AND BEAMING YARNS.			
Machinery to be used in sizing &c. yarns and fabrics.	11	3rd Jan. 1853	John Bleackley.
Dressing yarns for looms - - -	176	24th Jan. 1853	William Nairne.
Treatment, cleansing, or finishing of textile fabrics	355	10th Feb. 1853	William Fulton.
Dressing, sizing, and tape machines - -	641	14th March 1853	William Bashall.
Manufacture of piled figured fabrics by alterations in and additions to looms for weaving, including also a warping-machine.	716	24th March 1853	Charles Victor. Frederic de Roulet.
Machinery or apparatus for picking warps - (*And warping also creel pegs.*)	978	23rd April 1853	Thomas Knowles.
Machinery for warping and beaming yarns or threads.	1348	2nd June 1853	William Knowles.
Preparing for weaving wet spun yarns of flax and tow - - - - - - -	1662	13th July 1853	Abraham Walter Craig. Daniel Foster. Thomas Valentine.
Looms for weaving; apparatus connected therewith	1852	9th Aug. 1853	William Rowan.
Machinery, apparatus, or implements for weaving (*Applying moisture to yarns.*)	1948	20th Aug. 1853	William Vaughan. John Scattergood.
Machinery for dressing and warping yarns -	2186	21st Sept. 1853	George Peabody.
Machinery or apparatus for warping and sizing or otherwise preparing yarns or warps to be woven	2293	7th Oct. 1853	James Bullough. John Walmsley. David Whittaker.
Weaving by hand - - - - (*Warping-frame.*)	2491	27th Oct. 1853	Jean Martin Adolphe Bayet Lemonier.
Weaving and manufacturing raised pile fabrics; machinery employed therein. (*Subjecting silk yarn to acids.*)	2707	22nd Nov. 1853	Edward Briggs.
SMOKE PREVENTION AND CONSUMPTION; SAVING FUEL; WIND-GUARDS.			
Economizing fuel in the generation and heating of steam.	69	11th Jan. 1853	Joseph Beattie.
Grates of furnaces used in the manufacture of glass (*Saving fuel.*)	142	20th Jan. 1853	Richard Mountford Deeley.
Production and application of heated air - - (*Consuming smoke.*)	155	21st Jan. 1853	William Taylor.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SMOKE, &c.—*continued.*			
Consumption or burning of smoke	323	5th Feb. 1853	William Crossby.
Construction of furnaces or flues, whereby economy in the use of fuel. the consumption of smoke or gases, and the utilizing thereof, are ensured.	350	10th Feb. 1853	James Spotswood Wilson.
Blast-furnaces (*Saving fuel.*)	373	12th Feb. 1853	George Parry.
Manufacture of malleable iron and other metals (*Saving fuel.*)	426	18th Feb. 1853	William Darling.
Steam-boilers (*Saving fuel.*)	502	28th Feb. 1853	George Duncan.
Apparatus for consuming smoke	530	3rd March 1853	Simon O'Regan.
Improvements in locomotives, part of which improvements are applicable to other steam-engines. (*Burning the hydrogen without giving off smoke.*)	533	3rd March 1853	Auguste Edouard Loradoux Bellford.
Manufacture of crown, sheet, plate, and bottle glass (*Furnaces.*)	762	30th March 1853	James Bowron.
Improvements in locomotive-engines (*And curing smoky chimneys.*)	786	2nd April 1853	Sir James Caleb Anderson, Bart.
Improvements in earthenware kilns	868	11th April 1853	William Muir Campbell.
Steam-boilers; mode of supplying the same with water.	884	12th April 1853	Alfred Vincent Newton.
Consuming or preventing smoke and heating liquids	922	16th April 1853	Samuel Bayliss.
Improvements in and applicable to boilers or apparatus for generating steam, and in apparatus connected therewith.	959	21st April 1853	Thomas Dunn.
Steam-boilers; appendages thereto (*Consuming gases &c.*)	1021	27th April 1853	Thomas Culpin.
Apparatus for heating (*Combustion of gases &c.*)	1035	28th April 1853	William Armand Gilbee.
Means of consuming smoke	1049	29th April 1853	James Bristow. Henry Attwood.
Improvements in steam-boilers	1110	5th May 1853	Thomas Fearnley.
Economizing fuel by rendering available the heat from coke ovens, and applying the same to the heating of air, kilns, stoves, ovens, and to the generation of steam.	1176	12th May 1853	Joseph Sawtell.
Construction of chimneys or flues; apparatus for consuming smoke or utilizing the same.	1192	14th May 1853	John Browne.
Mode and apparatus for working the machinery in factories and ships, in connection with the steam-engines or steam-power now used therein. (*Economizing fuel.*)	1221	18th May 1853	Christopher Richard Norris Palmer.
Improvements in steam-boilers	1366	3rd June 1853	Isaiah Kendrick.
Mode of manufacturing cast steel (*Saving fuel.*)	1443	14th June 1853	Alfred Vincent Newton.
Steam-boilers	1534	24th June 1853	Joshua Hornton.
Consumption or prevention of smoke	1543	24th June 1853	James M'Connell.
Steam-boilers (*Saving fuel.*)	1561	28th June 1853	Auguste Edouard Loradoux Bellford.
Improvements in steam-boilers (*Saving fuel.*)	1608	5th July 1853	Peter Erard.
Improvements in furnaces used with steam-boilers, for the purpose of consuming smoke and economizing fuel.	1682	15th July 1853	Robert Gordon.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SMOKE, &c.—*continued.*			
Kilns for baking or burning clay	1749	25th July 1853	John Ferguson.
Improvements in safety-lamps, part or parts of such improvements being applicable to the consumption or prevention of smoke, and purposes of ventilation generally.	1851	9th Aug. 1853	Thomas Young Hall.
Apparatus for heating	2002	29th Aug. 1853	Peter Armand le Comte de Fontainemoreau.
An improvement in furnaces	2035	3rd Sept. 1853	John Thomas Jewiss. Daniel Jewiss.
Wind-guard or chimney-top	2066	8th Sept. 1853	John Dickinson Brunton.
Improvements in lighting, for consuming the carbon escaping combustion in ordinary flames.	2071	9th Sept. 1853	Peter Armand le Comte de Fontainemoreau.
Improvements in furnaces	2082	9th Sept. 1853	Jonathan Amory.
Boilers and furnaces for generating steam	2108	12th Sept. 1853	Joseph Maudslay.
Furnaces for effecting the consumption of smoke	2109	12th Sept. 1853	John Robison. William Jackson.
Steam-engine boilers (*Saving fuel.*)	2297	7th Oct. 1853	John Onions. Samuel Bromhead.
Potters' or earthenware kilns	2353	13th Oct. 1853	William Muir Campbell.
Improvements in furnaces	2359	13th Oct. 1853	Abraham Pope.
Means of or apparatus for reducing the quantity of smoke from the furnaces of boilers, coppers, pans, and other like vessels.	2377	15th Oct. 1853	Benjamin Price.
Prevention of smoke in steam-boilers	2424	20th Oct. 1853	John Beasley Burney.
Steam-boilers; method of setting or fixing the same.	2441	22nd Oct. 1853	Harry Bentley.
Certain improved means or arrangements for the prevention of smoke and the economizing of fuel in furnaces.	2453	24th Oct. 1853	Alexander Hett.
Construction of air-furnaces for the fusion of steel and other metals and for economizing fuel.	2472	26th Oct. 1853	George Holworthy Palmer.
Abstracting and condensing smoke arising from steam-engine and other furnaces; obtaining a supply of air for supporting the combustion of the fuel in such furnaces, thereby superseding the necessity of chimney-shafts and funnels.	2548	3rd Nov. 1853	William Wood.
Construction of steam-boilers; mode or method of fixing the same.	2560	4th Nov. 1853	William Hindman.
Steam-boiler and other furnaces	2574	5th Nov. 1853	Robert William Jearrad.
Means of consuming or otherwise preventing the escape of smoke from flues or other smoke-vents.	2625	12th Nov. 1853	John Gedge.
Furnaces and fire-places; prevention of smoke	2657	16th Nov. 1853	John Ferguson.
Mode of constructing marine-boilers	2660	16th Nov. 1853	James Bristow. Henry Attwood.
Construction of steam-engine boiler and other furnaces.	2661	17th Nov. 1853	George Carter.
Construction of steam boilers or generators (*Saving fuel.*)	2678	18th Nov. 1853	Amédée François Rémond.
Smoke-consuming apparatus for enabling every fire to consume its own smoke.	2792	30th Nov. 1853	Francis Sewell Cole.
Generating steam and consuming smoke	2793	1st Dec. 1853	Thomas Garnett. Daniel Adamson.
Consumption or prevention of smoke	2826	5th Dec. 1853	James Robertson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SMOKE, &c.—*continued.*			
Construction of boiler and other furnaces - -	2835	6th Dec. 1853	Robert Christopher Witty.
Boilers and furnaces - - - -	2882	10th Dec. 1853	Edward Green.
Obtaining motive-power - - - - (*Burning the smoke from steam-furnaces.*)	2912	15th Dec. 1853	Jean Baptiste Pascal.
Construction of steam-boilers or generators; arrangement of furnaces connected therewith.	2963	20th Dec. 1853	James Burrows.
SNUFFERS AND EXTINGUISHERS.			
Mode of manufacturing metallic handles for knives and forks, backs for razors, bows for scissors, and the relative parts of such like instruments. (*And applicable to snuffers.*)	1428	13th June 1853	William Smith.
Lighting and extinguishing gas-lamps - - (*Extinguishers.*)	2929	16th Dec. 1853	Stephen Norris.
SOAP; TREATING WASH-WATERS; CASE FOR SHAVING-SOAP.			
Manufacture of soap - - - - -	81	12th Jan. 1853	William Bryer Nation. John Dyer.
Improvements in soap—"Amylon or starch soap" -	266	31st Jan. 1853	George Stretton.
Treating soap-suds or wash-waters in which soap has been used.	345	9th Feb. 1853	William Birkett.
Treatment of oleaginous, fatty, or gelatinous substances, for purifying, decolourizing, compounding or clarifying the same.	377	12th Feb. 1853	William Pidding.
Treating soap-suds - - - - -	460	23rd Feb. 1853	Samuel Cunliffe Lister.
Treatment of soapy and greasy waters - -	689	21st March 1853	Thomas Sykes.
Treatment of certain saponaceous compounds obtained in the manufacture of soap - -	1027	27th April 1853	Alfred George Anderson. John Barker Anderson.
Manufacture of soap - - - -	1057	2nd May 1853	Henry Constantine Jennings.
Cases or receptacles for containing a composition shaving-soap or other articles.	1304	27th May 1853	Samuel Smith Shipley.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids. (*For soap-making.*)	1363	3rd June 1853	Ferdinand Louis Gossart.
Manufacture of soap and washing-paste and of the materials used therein - - - -	1641	9th July 1853	Pierre Auguste Tourniere. Louis Nicholas de Meckenheim.
Method of cleansing or purifying and treating soap-suds or wash-waters so as to fit them to be again used for the washing of wools and other similar matters.	1724	21st July 1853	William Birkett.
Manufacture of soap - - - -	1817	3rd Aug. 1853	Aristide Michel Servan.
Manufacture of soap - - - - -	1821	3rd Aug. 1853	Charles Hill Snell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SOAP, &c.—*continued.*			
Treating wash-waters containing soap, oils, saponified or saponifiable materials; obtaining products therefrom.	2016	31st Aug. 1853	Astley Paston Price.
Treating and bleaching resinous substances (*For making soap.*)	2167	17th Sept. 1853	Henry Constantine Jennings.
Manufacture of soap and saponaceous compounds	2169	17th Sept. 1853	Richard Archibald Brooman.
Manufacture of soap	2318	10th Oct. 1853	George Fergusson Wilson.
Preparing rapeseed oil	2433	21st Oct. 1853	James Warburton.
Utilizing the saponaceous matters contained in the waste waters of woollen and other manufactories	2519	31st Oct. 1853	Celestin Pechoin. Eugène Pechoin Barades.
Bleaching oils and fats (*For making soap.*)	2715	22nd Nov. 1853	Frederick Meyer.
Treatment or preparation of wool and of the wash-waters employed in such treatment. (*Communicated by Messrs. Villermet and Mannheimer.*)	2928	16th Dec. 1853	John Henry Johnson.
Washing or scouring wool, alpaca, and mohair, and fabrics composed entirely or partly of those materials. (*A saponaceous compound.*)	2978	22nd Dec. 1853	Benjamin Murgatroyd.
Compositions to be employed as substitutes for caoutchouc, gutta-percha, and certain fatty bodies. (*Making soap used in waterproofing.*)	3045	31st Dec. 1853	Stanislas Tranquile Modeste Sorel.
SOWING, MANURING.			
A new machine with its adjuncts or other apparatus to be used for agricultural purposes.	497	28th Feb. 1853	Theodore Baron Von Gilgenheimb.
Single seed drilling or dibbling machinery	1036	28th April 1853	Thomas Revis.
Machine for several agricultural purposes	1084	4th May 1853	George Bell.
Machinery or apparatus for effecting agricultural operations.	1151	10th May 1853	John Henry Johnson.
Drills for agricultural purposes	1581	30th June 1853	William Charles Spooner.
Drills for agricultural purposes	1582	30th June 1853	William Tasker.
Machine for digging and cultivating land	2418	19th Oct. 1853	Alexis Dussuc.
Apparatus to be attached to a drill for sowing grain or other seeds, for the purpose of mingling guano or other pulverized manure with the grain or seed to be sown, and depositing it in the ground at the same time with the seed, thereby greatly diminishing the quantity of guano or other manure required to produce the best fertilizing effects. (*Communicated by Thomas Frederick Nelson.*)	2721	23rd Nov. 1853	Charles Frederick Stansbury.
Hoeing and otherwise cultivating land (*Also drills.*)	2769	28th Nov. 1853	Robert Hawkins Nicholls.
Apparatus for cultivating, preparing, and treating land, and for sowing seeds.	2775	29th Nov. 1853	Patrick Kelly.
Improvements applicable to the distribution of manure.	2867	9th Dec. 1853	Frederick Osbourn.
Carts for distributing water or liquid manure	2943	17th Dec. 1853	Isaac James.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINDLES AND FLYERS.			
Machinery for spinning flax and tow - - (*Making flyers.*)	180	24th Jan. 1853	John Stevenson.
Improvement or improvements in mule spindles and spindles of a similar description for spinning or twisting various fibrous substances, and in the mode of manufacturing and producing the same.	454	23rd Feb. 1853	Samuel Beckett.
Manufacture of certain parts of machinery to be used in preparing and spinning cotton and other fibrous materials. (*Flyers, also buttons of spindles.*)	473	25th Feb. 1853	Francis Preston.
Apparatus called "pressers" employed in the preparation of cotton and other fibrous materials for spinning.	551	4th March 1853	George William Bott.
Spinning, roving, doubling, and twisting cotton, worsted, flax, and other fibrous materials - (*Bobbin and flyer.*)	605	9th March 1853	George Collier. Samuel Thornton.
Apparatus for winding, cleaning, doubling, twisting, and spinning silk, cotton-wool, flax, hemp, and other filamentous materials.	915	14th April 1853	Jean Baptiste Maniquet.
Machinery for preparing and spinning cotton and other fibrous substances.	1158	11th May 1853	John Crabtree. Thomas Livesey Scott.
Machinery for forging iron and other metals -	1353	2nd June 1853	Richard Longden Hattersley.
Machinery for spinning, doubling, and twisting cotton and other fibrous substances.	1406	9th June 1853	Henry Bernoulli Barlow.
Machinery used for spinning, doubling, and winding cotton-wool, flax, and other fibrous materials.	1658	12th July 1853	James Fletcher.
Spindles and bearings of lathes and drilling-machines, and other spindles and bearings.	2580	7th Nov. 1853	John Todd.
Certain improvements in apparatus or machines for forging, drawing, moulding, or forming spindles and various other articles in metal.	2615	11th Nov. 1853	John Platt.
SPINNING AND PREPARING FOR SPINNING.			
I.—Opening, Separating, Washing, Dressing, Scutching.			
Machinery or apparatus for washing or scouring wool - - - - - -	75	11th Jan. 1853	John Petrie. Samuel Taylor.
Machinery or apparatus used in the preparation of cotton-wool, flax, or other fibrous materials to be spun.	224	29th Jan. 1853	John Standish.
Method of preparing and spinning cotton-wool, flax, and other fibrous substances; machinery or apparatus employed therein. (*Opening.*)	255	31st Jan. 1853	Edmund Leach.
Machinery or apparatus for spinning cotton and other fibrous materials - - -	418	17th Feb. 1853	Thomas Clark Ogden. William Gibson.
Apparatus for washing slivers of wool - -	459	23rd Feb. 1853	Robert Milligan.
Machinery used in washing wool - - -	584	8th March 1853	Samuel Cunliffe Lister.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Machinery for breaking and dressing flax and other fibrous materials.	602	9th March 1853	Edward Maitland Stapley.
Washing woollen, linen, cotton, silken, hempen, skin, and flaxen materials and substances—"The rotary washing-machine."	680	19th March 1853	John Eldridge.
Apparatus for opening, cleaning, blowing, or scutching animal wool, cotton, or other fibrous substances or materials.	778	1st April 1853	John Smedley.
Manufacture of cloths; preparation of wool -	783	1st April 1853	George Fergusson Wilson.
Retting, breaking, and scutching flax, hemp, and other fibrous matters - - - - -	830	6th April 1853	Samuel Denison. Henry Dean Denison.
Treatment of flax, line, grasses, and other fibrous substances.	853	8th April 1853	Joshua Farrar.
Manufacture of flax - - - - -	902	14th April 1853	John Bethell.
Apparatus for winding, cleaning, doubling, twisting, and spinning silk, cotton-wool, flax, hemp, and other filamentous materials.	915	14th April 1853	Jean Baptiste Maniquet.
Machinery for preparing flax, hemp, and other vegetable fibrous substances for scutching or other manufacturing processes.	926	16th April 1853	George Albemarle Cator.
Disengaging silk of its gum - - - -	937	18th April 1853	Jean Jules Gonin.
Machinery for opening and preparing to be carded, combed, or drawn, cotton, silk, silk waste, tow, wool, or other fibrous substances.	980	23rd April 1853	Henry Houldsworth.
Lubricating materials - - - - -	1064	2nd May 1853	François Monfrant.
Preparing cotton-wool, flax, silk, and other fibrous substances for spinning.	1108	5th May 1853	John Hetherington.
Mode of feeding machines for opening, cleaning, blowing, and scutching cotton and other fibrous substances.	1178	12th May 1853	Charles Pooley.
Treating wool, silk, feathers, and other animal matters, for softening and otherwise improving the quality of the same.	1198	14th May 1853	Francis Montgomery Jennings.
Preparation and treatment of flax and other similar vegetable fibres.	1214	17th May 1853	Charles James Pownall.
Method of treating flax and hemp, whereby they are brought to such a state that they may be carded, spun, and woven by machinery such as is now employed in the manufacture of cotton and wool into yarn and cloth.	1267	23rd May 1853	Auguste Edouard Loradoux Bellford.
Machinery for treating the fibres of flax, hemp, china grass, and other analogous substances, preparatory to spinning.	1302	26th May 1853	Julius Augustus Roth.
Removing the gummy or glutinous matter from textile and other materials. (*Communicated by Messrs. Alcan and Limet.*)	1324	28th May 1853	John Henry Johnson.
Machinery for removing the seed from flax and other plants, and breaking the bolls or pods -	1358	2nd June 1853	Nicholas Marshall Cummins. John de Cock Kenifeck.
Machinery for preparing and spinning wool, hair, silk, flax, and other fibrous substances.	1411	9th June 1853	Joseph Smith.
Manufacture of yarn, and fabricating articles therefrom. (*From Lygeum Spartum.*)	1451	15th June 1853	Jules Dehau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Manufacture of yarn &c. by the application of a material not hitherto used in Great Britain for such purposes. (*Stipa tenacissima.*)	1452	15th June 1853	Jules Dehau.
Preparing wool and other fibrous substances -	1475	17th June 1853	Christopher Waud. Edward Waud. William Busfield.
Washing wool and hair; treating and preparing before being spun, wool, flax, cotton, and similar fibrous material.	1539	24th June 1853	Samuel Cunliffe Lister.
Machinery or apparatus for opening, cleaning, or otherwise preparing, cotton or other fibrous materials to be spun - - - - -	1709	18th July 1853	Thomas Wood. George Wade.
Separating the refuse vegetable matter contained in the stalk and leaves of the plantain species, and also trees grown in tropical climates, from the fibrous material of the same, in order that the latter may be manufactured into ropes or cordage, and for other purposes for which hemp and flax are used.	1723	21st July 1853	John Lilley.
Manufacture of saws - - - - - (*For saw-gins.*)	1742	23rd July 1853	Joseph Bennett Howell. William Jamieson.
Machinery for washing wool and hair - -	1794	1st Aug. 1853	Samuel Cunliffe Lister.
Machinery or apparatus for washing, scouring, cleansing, or steaming fibrous substances &c.	1823	4th Aug. 1853	Charles Butler Clough.
Obtaining wool from fabrics in a condition to be again used.	1835	5th Aug. 1853	James Lee Norton.
Separating or recovering the wool from cotton and woollen or other similar mixed fabrics, whereby the wool is rendered capable of being again employed - - - - - -	1891	12th Aug. 1853	William Aldred. Richard Fenton. William Crone.
Treating fibrous substances - - -	1923	17th Aug. 1853	Felix Alexandre Victor Delarbre.
Improved silk-cleaner - - - - -	1951	22nd Aug. 1853	Samuel Lomas.
Treatment of wool and silk; machinery for preparing silk so treated.	1981	26th Aug. 1853	Richard Archibald Brooman.
Converting certain refuse materials into yarn for the manufacture of woven and other fabrics. (*Refuse silk and fabrics.*)	2061	7th Sept. 1853	George Edward Ashton.
Application of the fibrous part of the palm tree and leaf to arts and manufactures.	2089	10th Sept. 1853	Arthur Warner.
Machinery or apparatus for the preparation of flax and similar fibrous material.	2119	13th Sept. 1853	James Hill Dickson.
Materials to be employed in the manufacture of textile fabrics and for other purposes. (*Fibres of mallows.*)	2213	26th Sept. 1853	Francis Frederick Clossmann.
Preparation of flax and other vegetable fibrous substances - - - - - -	2218	27th Sept. 1853	Robert Brisco. Peter Swires Horsman.
Treating certain exotic plants for the production of a fibrous substance—"Vegetable silk."	2235	30th Sept. 1853	Peter Armand le Comte de Fontainemoreau.
Apparatus used in washing wool and other fibrous material.	2252	1st Oct. 1853	William Brown.
Preparing cotton for spinning; machinery or apparatus for effecting the same.	2279	5th Oct. 1853	John Mason.
Machinery for preparing or scutching flax and other fibrous materials requiring such an operation. (*Communicated by Mr. Benjamin Delattre.*)	2300	7th Oct. 1853	Robert James Corlett.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Treating wool and fabrics composed of wool (*See* "OILING.")	2316	10th Oct. 1853	George Fergusson Wilson.
Machinery for slubbing, roving, and spinning cotton and other fibrous substances	2354	13th Oct. 1853	Robert Popple. Henry Woodhead.
Method of treating silk waste arising from winding, warping, and weaving silk, and rendering it capable of being spun or otherwise employed	2379	15th Oct. 1853	Buckley Royle. William MacEwan Chell.
A process for the preparation of hemp after the stripping.	2381	15th Oct. 1853	Charles Joseph Louis Cloux, junior.
Preparation of flax and other fibrous substances	2416	19th Oct. 1853	William Watt.
Treatment or manufacture of gutta-percha, and application thereof. (*Removing gum from cocoons.*) (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.
Treatment of fibrous materials other than flax and hemp.	2468	25th Oct. 1853	Marcus Davis.
Treating phormium tenax, flax, and other vegetable fibrous matters. (*Separating the fibre.*)	2496	28th Oct. 1853	Aristide Michel Servan.
Machinery for dressing flax, hemp, and other like fibrous substances.	2503	29th Oct. 1853	Richard Archibald Brooman.
Preparing wool for spinning	2551	3rd Nov. 1853	Thomas Irving.
Process of preparing flax or similar fibrous material and rendering it fit for spinning and weaving.	2619	11th Nov. 1853	James Hill Dickson.
Machinery for scutching flax, hemp, and other fibrous materials.	2807	2nd Dec. 1853	John Charles Wilson.
Apparatus for washing and scouring wool	2838	6th Dec. 1853	John Hargrave.
Scutching flax and hemp	2852	8th Dec. 1853	John Nelson. David Boyd.
Washing or scouring wool &c.	2857	8th Dec. 1853	Benjamin Murgatroyd.
Treatment or preparation of wool (*Communicated by Messrs. Villermet and Mannheimer.*)	2928	16th Dec. 1853	John Henry Johnson.
Preparing rovings and yarns of wool (*Steaming.*)	2930	16th Dec. 1853	Samuel Smith.
Washing or scouring wool, alpaca, and mohair	2978	22nd Dec. 1853	Benjamin Murgatroyd.
II.—Carding, Combing, Heckling; Making Cards.			
Doffing and preparing rovings of wool	89	12th Jan. 1853	John Bennett. Henry Charlesworth.
Machinery for heckling or combing flax and other fibrous substances.	201	26th Jan. 1853	James Combe.
Combing wool, hair, or other fibrous materials	216	28th Jan. 1853	George Edmond Donisthorpe. John Crofts.
Method of preparing cotton-wool, flax, or other fibrous materials; machinery or apparatus employed therein.	226	29th Jan. 1853	Henry Moorhouse.
Method of preparing and spinning cotton-wool, flax, and other fibrous substances; machinery or apparatus employed therein. (*Carding.*)	255	31st Jan. 1853	Edmund Leach.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Heating and making cards - - -	505	28th Feb. 1853	Samuel Cunliffe Lister.
Machinery or apparatus used in the preparation of wool, silk, flax, and mohair, to be spun - -	507	1st March 1853	Thornton Littlewood. Charles Littlewood.
An improved comb or gill for heckling, drawing, roving, and otherwise preparing to be spun, hemp, flax, tow, silk, wool, and other fibrous substances.	666	18th March 1853	William King Westly.
Machinery or apparatus for grinding or setting the surfaces of cylinders and rollers employed in carding-engines - - - - -	685	19th March 1853	Samuel Radcliffe. Knight William Whitehead.
Machinery or apparatus for preparing and spinning cotton and other fibrous materials - -	781	1st April 1853	Henry Spencer. Henry Tattersall. Hugh Simpson.
Machinery or apparatus for combing wool, cotton, silk, flax, and other suitable fibrous materials -	799	4th April 1853	Jesse Ross. Thomas Robert Hafford Ross.
Apparatus used in preparing and combing wool and other fibrous materials.	835	7th April 1853	Frederick William Mowbray.
Preparing cotton and other fibres - - -	890	13th April 1853	James Noble.
Preparing cotton and other fibres - - -	894	13th April 1853	James Noble.
Certain new combinations of gutta-percha with other materials; method of applying such for use. (*Foundations for card teeth.*)	906	14th April 1853	John Wallace Duncan.
Improvements applicable to carding-engines used for carding cotton-wool and other fibrous material.	910	14th April 1853	William Ogden.
Treating refuse silk waste; converting it into a valuable product. (*Producing slivers.*)	920	15th April 1853	William Edward Newton.
Machinery used for combing cotton, silk, silk waste, flax, tow, wool, and other fibrous substances.	981	23rd April 1853	Henry Houldsworth.
Machinery for combing wool or other fibrous materials.	983	23rd April 1853	William Johnson.
Machinery for combing cotton-wool, silk waste, flax, tow, and other fibrous substances.	1029	28th April 1853	John Hetherington.
Combing of wool and other fibrous materials -	1043	29th April 1853	Jacques Stanislas Vigoureux.
Machinery for combing or dressing silk and other fibrous substances.	1101	5th May 1853	Joseph Dempsey Holdforth.
Machinery for combing and preparing wool and other fibrous materials.	1137	9th May 1853	John Henry Johnson.
Treating and preparing before being spun, wool, cotton, and other fibrous materials.	1157	11th May 1853	Samuel Cunliffe Lister.
Machinery for combing and preparing wool and other fibrous substances.	1220	18th May 1853	Charles Cowper.
Machinery for making wire-cards - - -	1254	20th May 1853	William Carr Thornton.
Machinery for combing wool - - -	1282	25th May 1853	Louis Auguste Derverte.
Carding wool and other fibrous substances; manufacture of cards for that purpose.	1318	28th May 1853	Daniel Bateman.
Machinery for preparing and spinning wool, hair, silk, flax, and other fibrous substances.	1411	9th June 1853	Joseph Smith.
Combing wool and other fibrous substances -	1412	9th June 1853	Joseph Smith.
Manufacture of yarn, and fabricating articles therefrom. (*From Lygeum Spartum.*)	1451	15th June 1853	Jules Dehau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Manufacture of yarn &c. by the application of a material not hitherto used in Great Britain for such purposes. (*Stipa tenacissima.*)	1452	15th June 1853	Jules Dehau.
Washing wool and hair; treating and preparing before being spun, wool, flax, cotton, and similar fibrous material. (*Carding; making combs.*)	1539	24th June 1853	Samuel Cunliffe Lister.
Machinery or apparatus for combing wool, cotton, flax, silk, and other fibrous substances - -	1547	25th June 1853	Daniel Illingworth. Alfred Illingworth. Henry Illingworth.
Machinery or apparatus for preparing and spinning cotton and other fibrous substances - -	1555	27th June 1853	John Mason. Luke Ryder.
Machinery or apparatus for carding and otherwise preparing cotton or other fibrous materials to be spun; cleaning or stripping cards used in such operations.	1580	30th June 1853	Edward Davies.
Machinery for drawing wool and other staple - (*Combing.*)	1602	5th July 1853	Nathan Pollard.
Machinery for heckling flax, hemp, china grass, and other fibrous materials.	1646	11th July 1853	Peter Fairbairn.
Machinery or apparatus for carding or otherwise preparing cotton or other fibrous materials to be spun - - - - - - -	1709	18th July 1853	Thomas Wood. George Wade.
Machinery for preparing for spinning cotton-wool and other fibrous substances.	1782	30th July 1853	George Ambler.
Machinery or apparatus for preparing, doubling, and twisting cotton and other fibrous materials -	1924	17th Aug. 1853	Thomas Clark Ogden. William Gibson.
Heckling-machines - - - - - -	1935	18th Aug. 1853	Peter Fairbairn.
Treatment of wool and silk; machinery for preparing silk so treated.	1961	26th Aug. 1853	Richard Archibald Brooman.
Machinery for preparing and combing wool, hair, flax, silk, and other fibrous substances.	1967	27th Aug. 1853	William Hargreaves.
Converting certain refuse materials into yarn for the manufacture of woven and other fabrics.	2061	7th Sept. 1853	George Edward Ashton.
Machinery for heckling flax, hemp, china grass, and other fibrous substances - - -	2239	30th Sept. 1853	Robert Brisco. Peter Swires Horsman.
Carrier-combs to be used in combing wool, cotton, silk, flax, or other fibrous substances.	2244	1st Oct. 1853	Edward Davies.
Preparing or combing wool and other fibrous substances.	2249	1st Oct. 1853	Isaac Ambler.
Machinery for spinning and doubling cotton and other fibrous substances, and for grinding cards	2251	1st Oct. 1853	Robert Halliwell. William Johnson.
Machinery for preparing and combing wool - -	2370	14th Oct. 1853	William Edward Newton.
Combing cotton and wool - - - -	2394	17th Oct. 1853	Samuel Cunliffe Lister.
Machinery for combing flax, tow, wool, and other fibrous substances - - - -	2432	21st Oct. 1853	James Garth Marshall. Peter Fairbairn.
Machinery for combing and preparing wool and other fibrous materials. (*Communicated by Henri Jules Alphonse Paris.*)	2594	8th Nov. 1853	John Henry Johnson.
Combing wool, cotton, and other fibrous materials -	2737	24th Nov. 1853	Samuel Cunliffe Lister.
Carding-engine for carding cotton and other fibrous materials. (*Communicated by George Wellman.*)	2747	25th Nov. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
An improvement in cards for carding - -	2760	26th Nov. 1853	Jules Roth. Henri Danner.
Machinery for combing flax or other fibrous materials	2791	30th Nov. 1853	Norbert de Landtsheer.
Combing wool, hair, cotton, and other fibrous materials.	2810	2nd Dec. 1853	Samuel C. Lister.
Machinery for operating upon wool, alpaca, mohair, and other fibrous materials, preparatory and prior to being spun.	2937	17th Dec. 1853	Joseph Sharp Bailey.
Machinery for combing wool and other fibrous materials.	3037	31st Dec. 1853	Joseph Holbrey.
III.—Roving, Spinning, Doubling.			
Roving, spinning, or twisting cotton or other fibrous substances—"Larwell's improvements."	38	6th Jan. 1853	William Edward Newton.
Machinery for preparing and spinning flax, tow, and other fibrous substances.	73	11th Jan. 1853	Joseph Robert Wilkin Atkinson.
Machinery applicable to spinning, doubling, and winding of cotton-wool, flax, silk, and other fibrous materials.	80	12th Jan. 1853	James Fletcher.
Doffing and preparing rovings of wool - -	89	12th Jan. 1853	John Bennett. Henry Charlesworth.
Machinery for drawing the sliver and rove of flax, hemp and tow - - - - -	125	18th Jan. 1853	Peter Fairbairn. Samuel Renny Mathers.
Machinery for winding or doubling yarns - -	137	20th Jan. 1853	John Crabtree.
Machinery for spinning flax and tow - -	180	24th Jan. 1853	John Stevenson.
Method of preparing and spinning cotton-wool, flax, and other fibrous substances; machinery or apparatus employed therein.	255	31st Jan. 1853	Edmund Leach.
Manufacture of certain parts of machinery to be used in preparing and spinning cotton and other fibrous materials.	473	25th Feb. 1853	Francis Preston.
Apparatus called "presses" employed in the preparation of cotton and other fibrous materials for spinning.	551	4th March 1853	George William Bott.
Machinery or apparatus to be employed in the preparing of cotton and other fibrous materials for spinning - - - - - (*Stopping drawing-frames, also slubbing and roving frames.*)	588	8th March 1853	James Veevers. Henry Ashworth.
Spinning, roving, doubling, and twisting cotton, worsted, flax, and other fibrous materials.	605	9th March 1853	George Collier. Samuel Thornton.
Treatment or manufacture of textile materials - (*Removing knots in spinning.*)	640	14th March 1853	William Stevenson.
Machinery or apparatus for spinning cotton and other fibrous materials - - - -	664	18th March 1853	James Tweedale. Abraham Alfred Tweedale. Samuel Tweedale.
An improved comb or gill for heckling, drawing, roving, and otherwise preparing to be spun, hemp, flax, tow, silk, wool, and other fibrous substances.	666	18th March 1853	William King Westley.
Machinery for spinning and doubling cotton and other fibrous substances.	714	24th March 1853	William Prior Sharp.
Machinery for preparing, spinning, and doubling cotton and other fibrous materials - -	715	24th March 1853	Robert Grundy. James Jones.
Manufacture of textile materials - - - (*Drawing-rollers.*)	722	24th March 1853	William Edie.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Manufacture of woven, textile, and looped fabrics; machinery employed therein. (*From slivers formed into thread by rollers, fingers, &c.*)	753	29th March 1853	William Hodgson.
Machinery or apparatus for preparing and spinning cotton and other fibrous materials	781	1st April 1853	Henry Spencer. Henry Tattersall. Hugh Simpson.
Doubling wool and other fibrous substances	792	2nd April 1853	Frederick William Mowbray.
Machine for doubling, twisting, and reeling fibrous substances.	849	8th April 1853	Jean Joseph Theodore Pratviel.
Treating rovings for spinning	892	13th April 1853	Francis Burden.
Production of raw and thrown silk	901	14th April 1853	John Chadwick. Thomas Dickins.
Apparatus for doubling, twisting, and spinning silk, cotton-wool, flax, hemp, and other filamentous materials.	915	14th April 1853	Jean Baptiste Maniquet.
Machinery for preparing and spinning cotton and other fibrous substances.	1005	27th April 1853	William Johnson.
Machinery for drawing, roving, and spinning flax, hemp, and other fibrous substances	1032	28th April 1853	Peter Fairbairn. Ferdinand Kaselowsky.
Slubbing and roving frames for preparing for spinning cotton, flax, and other fibrous substances.	1053	30th April 1853	Weston Grimshaw.
Machinery for preparing and spinning cotton and other fibrous substances	1158	11th May 1853	John Crabtree. Thomas Livesey Scott.
Machinery for forging iron and other metals (*For flyers.*)	1353	2nd June 1853	Richard Longden Hattersley.
Machinery for spinning, doubling, and twisting cotton and other fibrous substances.	1406	9th June 1853	Henry Bernoulli Barlow.
Machinery for preparing and spinning wool, hair, silk, flax, and other fibrous substances.	1411	9th June 1853	Joseph Smith.
Spinning-machinery	1421	10th June 1853	Alfred Vincent Newton.
Manufacture of yarn, and fabricating articles therefrom. (*From Lygeum Spartum.*)	1451	15th June 1853	Jules Dehau.
Manufacture of yarn, &c. by the application of a material not hitherto used in Great Britain for such purposes. (*Stipa tenacissima.*)	1452	15th June 1853	Jules Dehau.
Improvements in spinning	1489	18th June 1853	James Heginbottom. Joseph Heginbottom.
Apparatus for preparing and spinning cotton and other fibrous materials.	1497	18th June 1853	Samuel Schofield.
Machinery for spinning wool, hair, silk, flax, and other fibrous substances	1504	20th June 1853	William Hodgson. Henry Hodgson.
Treating and preparing before being spun, wool, flax, cotton, and similar fibrous materials. (*Drawing.*)	1539	24th June 1853	Samuel Cunliffe Lister.
Machinery or apparatus for preparing and spinning cotton and other fibrous materials	1555	27th June 1853	John Mason. Luke Ryder.
Machinery for drawing wool and other staple	1602	5th July 1853	Nathan Pollard.
Machinery or apparatus for preparing, spinning, and doubling cotton-wool and other fibrous substances.	1628	8th July 1853	William Robertson.
Machinery used for spinning, doubling, and winding cotton-wool, flax, and other fibrous materials.	1658	12th July 1853	James Fletcher.
Machinery or apparatus for doubling cotton and other fibrous materials.	1917	16th Aug. 1853	Peter Foxcroft.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING &c.—*continued.*			
Machinery or apparatus for preparing, doubling, and twisting cotton and other fibrous materials -	1924	17th Aug. 1853	Thomas Clark Ogden. William Gibson.
Machinery used for spinning, doubling, and winding cotton-wool, flax, silk, and other fibrous materials.	1989	27th Aug. 1853	James Hill.
Machinery for spinning cotton or other fibrous substances.	2050	6th Sept. 1853	John Kerfoot.
Converting certain refuse materials into yarn for the manufacture of woven and other fabrics.	2061	7th Sept. 1853	George Edward Ashton.
Improvements in spinning-machinery - -	2064	9th Sept. 1853	Henry Woodhead.
Machines for spinning and doubling - -	2192	22d Sept. 1853	Peter Rothwell Arrowsmith. James Newhouse.
Machinery for spinning and doubling - -	2193	22nd Sept. 1853	Edward Oldfield.
Machinery for slubbing, roving, and spinning cotton and other fibrous substances.	2214	27th Sept. 1853	Robert Popple.
Machinery for spinning and doubling cotton and other fibrous substances. - - - -	2216	27th Sept. 1853	William Prior Sharp. John Hill. William Martin.
Machinery for spinning and doubling cotton and other fibrous substances, and for grinding cards	2251	1st Oct. 1853	Robert Halliwell. William Johnson.
Machinery or apparatus for spinning and doubling fibrous materials - - - - -	2347	12th Oct. 1853	James Higgins. Thomas Schofield Whitworth.
Machinery for preparing and spinning cotton and other fibrous substances.	2355	13th Oct. 1853	John Elce.
Machinery for spinning cotton and other fibrous substances - - - - - -	2438	21st Oct. 1853	James Greenbank. Samuel Pilkington.
Machinery for spinning and doubling silk - -	2522	1st Nov. 1853	Samuel Lomas.
Machinery or apparatus for spinning and doubling cotton and other fibrous substances.	2543	2nd Nov. 1853	Henry Brierly.
Machinery for spinning and doubling - -	2547	3rd Nov. 1853	Peter M'Gregor.
Certain improvements in machinery or apparatus for spinning cotton and other fibrous substances	2616	11th Nov. 1853	Henry Kilshaw. Richard Hacking.
Machinery or apparatus to be employed in the preparation of cotton and other fibrous substances for spinning - - - - - (*Twisting slivers.*)	2624	12th Nov. 1853	Henry Kilshaw. Richard Hacking.
Machinery for spinning, doubling, and reeling cotton and other fibrous substances.	2633	14th Nov. 1853	Samuel Fletcher Cottam.
Machinery for winding, doubling, and spinning silk	2723	23rd Nov. 1853	John Hill, senior. John Hill, junior.
Machinery or apparatus for doubling, twisting, and spooling woollen, cotton, and other yarns - -	2733	24th Nov. 1853	Hugh Mason. John Jones.
Machinery for spinning - - - - -	2782	30th Nov. 1853	John Elce.
Machinery or apparatus for spinning cotton and other fibrous substances.	2785	30th Nov. 1853	John Hewitt.
Improvements applicable to spinning-machines known as mules and to machines of similar character, for clearing or cleaning certain parts of such machines.	2787	30th Nov. 1853	Richard Balderstone.
Machinery for spinning and doubling - -	2828	6th Dec. 1853	Edward Oldfield.
Machinery for spinning - - - - -	2840	7th Dec. 1853	William Slater. Robert Halliwell.
Slubbing and roving frames for cotton and other fibrous substances - - - - -	2865	9th Dec. 1853	Richard Eccles. John Mason. Leonard Kaberry.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Preparing rovings and yarns of wool - -	2930	16th Dec. 1853	Samuel Smith.
Machinery for operating upon wool, alpaca, mohair, and other fibrous materials, preparatory and prior to being spun. (*Drawing.*)	2937	17th Dec. 1853	Joseph Sharp Bailey.
Winding and doubling silk; applicable to the treatment of other fibrous substances.	3001	27th Dec. 1853	Thomas Molyneaux.
Improvements in bobbin-machines - - - (*Applicable to all kinds of spinning.*)	3032	31st Dec. 1853	Chretien Guillaume Schönheer.
For Spinning Cordage—*see* "ROPES, &c." For Trying the Strength of Yarn—*see* "TESTING, &c."			
SPOONS AND LADLES.			
Improvements in certain kinds of spoons and ladles	91	13th Jan. 1853	Charles Bullivant. Charles Hackney.
Manufacture of spoons and ladles - - -	98	14th Jan. 1853	Richard Taylor. Hezekiah Henry Salt.
Manufacture of spoons and other similar articles for domestic use. (*As ladles.*)	401	16th Feb. 1853	Job Cutler.
SPRINGS.			
Taps and other apparatus for filtering and drawing off liquids.	1	1st Jan. 1853	William Wilkinson.
Vulcanized india-rubber springs for trousers and breeches, with instructions to adjust the same.	2	1st Jan. 1853	Henry Bentley.
Certain improvements, parts of which are applicable to the construction of carriages for common roads.	53	8th Jan. 1853	Robert Lovely.
Communicating between the guard and driver of a railway-train; apparatus employed therein.	220	28th Jan. 1853	Rowland Speed.
Transmitting motive-power to machinery; regulating the action of rotary machines.	239	29th Jan. 1853	William Constable.
Machinery or apparatus for testing or ascertaining the strength of yarn, thread, wire, strings, or fabrics.	251	31st Jan. 1853	Louis Guillaume Perreaux.
Manufacture of parasols - - - - -	287	2nd Feb. 1853	Ismael Isaac Abadie. Henri Lauret.
Improvements in and applicable to certain descriptions of engines for driving piles. (*Springs for adjusting the pulleys.*)	295	3rd Feb. 1853	John Bower.
Railway-carriages - - - - - -	310	4th Feb. 1853	Jacob Vale Asbury.
Construction and mode of closing scent and other bottles.	369	12th Feb. 1853	Thomas Robert Mellish.
Modes of giving flexibility to beds, sofas, seats, and other similar articles.	382	14th Feb. 1853	Peter Armand le Comte de Fontainemoreau.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPRINGS—*continued.*			
Book-binding	406	16th Feb. 1853	Edouard Sy.
Joints for the sticks of parasols and other like purposes. (*Communicated by Alexander Porecky.*)	462	23rd Feb. 1853	Adam Cyrus Engert.
Machinery or apparatus for retarding or stopping railway-trains, also applicable as a signal or communication from one part of a train to another	465	24th Feb. 1853	Henry Walmsley. Thomas Critchley.
Applying skids or drags to omnibuses	478	25th Feb. 1853	John Palmer de la Fons.
Method of constructing cornice-poles and picture and curtain rods, and other rods from which articles are suspended. (*Using helical springs.*)	579	8th March 1853	Thomas James Perry.
Gunnery and projectiles (with pouch for the latter) adapted for muskets, rifles, pistols, and heavy cannon for field-pieces, or forts, batteries, ships of war and other vessels. (*Using springs to prevent recoil.*)	591	8th March 1853	John James Alexander Maccarthy.
Saddlery and harness (*India-rubber springs in reins.*)	595	9th March 1853	Samuel Blackwell.
Improvements in railway-carriages (*Bearing springs.*)	729	26th March 1853	Charles de Bergue.
Machinery for weaving and printing (*Springs to prevent the rebound of the shuttle.*)	744	29th March 1853	Luke Smith.
Certain improvements in springs, and also in the modes of their application to railway engines and carriages.	745	29th March 1853	Thomas Hill.
Window-sash fastenings	791	2nd April 1853	Christopher Garman Rosenkilde.
Improvements applicable to looms for the manufacture of textile fabrics	798	4th April 1853	Robert William Sievier. James Crosby.
Steam-engine governors (*Applying springs.*)	911	14th April 1853	William John Thomas Jones.
Construction of wheeled carriages	930	18th April 1853	James Begbie.
Improvements in carriage-springs	1112	6th May 1853	Charles William Bell.
Construction of springs for carriages and similar purposes.	1294	26th May 1853	William Warcup.
Improvements in carriages	1370	3rd June 1853	William Edward Maude.
Application, construction, and arrangement of springs for carriages and such like purposes.	1394	7th June 1853	George Bazett Colvin Leverson.
Improvements in door-springs	1453	15th June 1853	James Dilkes. Edward Turner.
Turning over the leaves of books, music, and engravings; apparatus for effecting the same. (*Communicated by Claude Desbeaux.*)	1563	28th June 1853	John Henry Johnson.
Harness for horses and other animals; manufacture of springs for the same.	1576	30th June 1853	Williams Rice.
Improvements in elastic springs	1612	6th July 1853	Peter Gaskell.
Manufacture of certain drawing or mathematical instruments, also packing or fitting the same in their cases;—also applicable to the packing or fitting of other articles	1634	9th July 1853	James Parkes. Samuel Hickling Parkes.
Apparatus for holding and turning over the leaves of music or music-books.	1645	11th July 1853	George Ager.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPRINGS—*continued.*			
Sofa springs, useful for spring-stuffed upholstery work generally; adaptation thereof to mattresses.	1652	12th July 1853	Joseph Bacon Finnemore.
Mode of equilibrating indefinitely the weight of atmospheres.	1708	18th July 1853	Peter Armand le Comte de Fontainemoreau.
Apparatus for cleansing and separating corn, grain, and other seeds.	1732	22nd July 1853	John Gillam.
Springs for carriages - - - -	1733	22nd July 1853	George Spencer.
Obtaining motive-power - - - -	1868	11th Aug. 1853	Thomas Dewsnup.
Steam-boilers; apparatus applicable thereto and to be used therewith - - - - (*Valve springs.*)	2029	2nd Sept. 1853	John Tayler. James Griffiths. Thomas Lees.
An improvement in trousers to supersede the use of braces, applicable to other articles of apparel. (*Inserting springs.*)	2211	26th Sept. 1853	Henry Winter.
Improvements in and applicable to looms for weaving.	2375	15th Oct. 1853	Charles Coates.
Letterpress printing-machinery - - -	2396	17th Oct. 1853	Augustus Applegath.
Buffer, traction, or suspension springs for railway carriages, trucks, tenders, or locomotives.	2425	20th Oct. 1853	Gustave Gourgas.
An elastic spring contained in a cylindric tube or tubular case, the lid of which moves up and down according to the pressure.	2443	22nd Oct. 1853	Jean François Mermet.
Construction of carriages; means of preventing the overturning of the same when horses take fright.	2524	1st Nov. 1853	Mark Newton.
Fastening the ends of springs made of india-rubber	2545	2nd Nov. 1853	Richard Edward Hodges.
Construction and arrangement of the buffing apparatus of railway-carriages; mode of applying the buffer and draw springs to such carriages.	2563	4th Nov. 1853	William Racster.
Springs for carriages - - - -	2578	5th Nov. 1853	Edwin Kesterton.
Improvements in carriage-springs - - -	2642	15th Nov. 1853	John Josias Catterson.
Railway and other carriages and vehicles - -	2673	18th Nov. 1853	Perceval Moses Parsons.
Improvements in locks - - - -	2698	21st Nov. 1853	Walter Henry Tucker. William Rashleigh Reeves.
Machinery for drilling or boring rocks and other hard substances.	2854	8th Dec. 1853	William Edward Newton.
Locks of fire-arms - - - - -	2987	24th Dec. 1853	Richard George Coles.
Machines used for rivetting together metallic plates	3028	30th Dec. 1853	Walter Mabon.
Electric telegraphs and apparatus connected therewith.	3031	31st Dec. 1853	Henry Vernon Physick.
Improvements in bobbin-machines - -	3032	31st Dec. 1853	Chretien Guillaume Schönherr.
STABLE FITTINGS; HAY-RACKS; FASTENING HORSES.			
Construction of hay-racks; apparatus or apparatuses to contain fodder for horses and other cattle; method or method of fastening horses or other cattle to prevent their overcasting.	1020	27th April 1853	James Andrew Bruce.
Fittings for stables - - - -	2415	19th Oct. 1853	James Barton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STAMPS AND DAMPERS; ADHESIVE STAMPS AND LABELS; AFFIXING STAMPS.			
Apparatus for cutting and affixing stamps and labels	242	29th Jan. 1853	George Twigg. Arthur Lucas Silvester.
Construction of self-inking stamping-apparatus -	808	4th April 1853	Alfred Vincent Newton.
Construction of hand stamp - - -	1338	31st May 1853	William Edward Newton.
Improved label-damper - - - -	1458	16th June 1853	William Baddeley.
A self-adjusting stamp - - - -	1532	23rd June 1853	Joseph Aspinall.
Machinery or apparatus for stamping or printing coloured surfaces.	1774	29th July 1853	Griffith Jarrett.
Affixing postage and other stamps - - -	1872	11th Aug. 1853	Henry Moore Naylor.
Apparatus for affixing adhesive stamps and labels -	2360	13th Oct. 1853	Joseph Piper.
Adhesive stamps and labels - - - (*Perforating postage-stamps.*) (*Provisional protection not granted.*)	2422	20th Oct. 1853	John Coope Haddan.
Apparatus for damping paper and other substances in order to prepare the same for the reception of labels, stamps, and other like articles coated with a gummy or adhesive matter.	2806	2nd Dec. 1853	Alexander Bain.
STARCH.			
Treating corn or grain and obtaining products therefrom.	428	18th Feb. 1853	Henry Noad.
Manufacture of starch - - - -	603	9th March 1853	Henry Ransford.
Manufacture of starch - - - -	1946	20th Aug. 1853	Jean Baptiste Polaillon. François Maillard.
STATUARY, SCULPTURE, COLUMNS, MONUMENTS.			
A new composition of different metals or metallic substances. (*For moulding statues, columns, and monumental fountains.*)	35	6th Jan. 1853	Edme Augustin Chameroy.
Means of copying or reproducing models or figures in marble, stone, ivory, or other substances. (*Sculpturing.*)	61	10th Jan. 1853	Antoine Hiron.
Sepulchral and other commemorative monuments -	363	10th Feb. 1853	William Potts.
Machinery for cutting, carving, and engraving wood, stone, metal, and other suitable materials.	856	9th April 1853	George Searby.
Coffins, catacombs, sarcophaguses, and cenotaphs -	1670	14th July 1853	The Honourable Sir Richard Brown.
Depositing metals or alloys of metals - -	1777	29th July 1853	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STATUARY, &c.—*continued.*			
Manufacture or treatment of gutta-percha; application thereof. (*Communicated by Louis François Alexandre Deseille.*)	1904	13th Aug. 1853	John Henry Johnson.
Application of the slags or refuse matters obtained during the manufacture of metals. (*Tombs, gravestones.*)	1995	27th Aug. 1853	George Robinson.
Application of sulphate of lime to the fabrication of mosaics and incrustations, and for any new processes of colouration of certain varieties of this substance. (*Facing monuments.*)	2030	2nd Sept. 1853	Barthélemy Auric.
Machinery for carving, cutting, chiselling, and engraving.	2245	1st Oct. 1853	Thomas Woodcock.
Treatment or manufacture of gutta-percha, and application thereof. (*For making statuettes.*)	2430	21st Oct. 1853	John Henry Johnson.
Improvements in casting - - - - (*Columns.*)	2450	24th Oct. 1853	James Denoon Young.
STAYS OR CORSETS, AND FASTENINGS.			
Improvements in the manufacture of hats, caps, and bonnets, which improvements are also applicable to other articles of wearing-apparel. (*Linings or stiffeners for ladies' dresses &c.*)	268	31st Jan. 1853	Thomas Charles Clarkson.
Certain instruments, apparatus, and articles for the application of electro-galvanic and magnetic action for medical purposes. (*Corset busks.*)	806	4th April 1853	Antoine Burq.
Busk s for stays - - - - -	1039	29th April 1853	Charles Auguste Joubert. Leon Jacques Fricas. Jules César Kohler.
Construction of stays - - - -	1316	28th May 1853	Caleb Hill.
Depositing metals or alloys of metals - -	1777	29th July 1853	William Edward Newton.
Fastening corsets by a mechanical busk - -	1879	12th Aug. 1853	Louis Van Carneghem.
Manufacture of stays or corsets - - - (*Communicated by Adolphe Georges Geresme.*)	2044	5th Sept. 1853	John Henry Johnson.
Stay and other like fastenings - - -	2087	9th Sept. 1853	Robert Drew. John Bayliss.
An improvement in trousers to supersede the use of braces; — applicable to other articles of apparel. (*Applicable to corsets.*)	2211	26th Sept. 1853	Henry Winter.

Subject-matter of Patent.	Number of Patent	Date.	Name of Patentee.
STEAM AND OTHER GOVERNORS; REGULATING THE SPEED AND POWER OF ENGINES; STARTING, STOPPING, AND REVERSING APPARATUS.			
Atmospheric-engines (*Regulating power.*)	20	5th Jan. 1853	William Edward Newton.
Starting, stopping, and reversing steam-engines	210	28th Jan. 1853	Robert Shaw.
Apparatus for regulating or governing the speed of steam or other engines.	352	10th Feb. 1853	Charles Cuylits.
Means of communicating between the passengers, guard, and driver of a railway-train; — partly applicable to communicating on vessels. (*Applicable to starting or reversing.*)	378	12th Feb. 1853	Charles Hadley.
Construction of locomotive-engines (*Reversing the motion.*)	485	26th Feb. 1853	Jean Joseph Frechin.
Apparatus for regulating the speed of machinery	523	2nd March 1853	Lewis Jennings.
Steam-engines (*Governor.*)	525	2nd March 1853	Robert Waddell.
Steam-engines (*Opening and closing valves.*)	558	5th March 1853	William Todd.
Improvements in working the valves of steam-engines.	647	15th March 1853	Perceval Moses Parsons.
Regulating steam-engines and other prime movers (*Governor.*)	684	19th March 1853	John Henry Johnson.
Working and increasing the safety of railways (*Closing steam-valves of engines.*)	723	24th March 1853	Robert Walker.
Steam-engines; apparatus connected therewith (*Regulating speed.*)	797	4th April 1853	William Beckett Johnson.
Obtaining motive-power by electro-magnetism (*Governor; reversing; regulating speed.*)	881	12th April 1853	Robert John Kaye. John Ormrod Openshaw.
Steam-engine governors	911	14th April 1853	William John Thomas Jones.
Improvements in steam-engines, which improvements are also applicable to the machinery or apparatus connected to steam-boilers. (*Self-acting regulator.*)	1194	14th May 1853	Thomas Stephen Holt.
Apparatus for regulating or governing the speed of steam-engines.	1242	19th May 1853	Joseph Wainwright.
Regulating the speed and indicating the power of steam and other motive-power engines.	1744	25th July 1853	Alexander Clark.
Governors for steam-engines	2149	15th Sept. 1853	Sydney Smith.
Machinery for regulating the velocity of steam-engines and other motive-power engines.	2322	11th Oct. 1853	James Knowles.
Steam-engine governors	2393	17th Oct. 1853	Ellen Jones.
Regulating motive-power engines	2408	19th Oct. 1853	John Wright Child. Robert Wilson.
Apparatus for governing the speed of steam and other motive-power engines.	2562	4th Nov. 1853	William Crossland.
Preventing undue oscillations in engines, machinery, carriages, and other apparatus.	2892	13th Dec. 1853	Christian Schiele.
Means of preventing accidents upon railways (*Reversing the steam.*)	2944	17th Dec. 1853	Matthew Parsons Houghton. Andrew Stewart.
Governors or regulators for steam-engines and other machinery.	2972	21st Dec. 1853	John Jones.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS; CLEANSING AND PREVENTING INCRUSTATION; WATER-FEEDING APPARATUS.			
I.—Constructing Boilers, Generating Steam.			
Motive-power engines; application of motive-power to the same. (*Vapour-generator.*)	12	3rd Jan. 1853	EdmeAugustin Chameroy.
Economizing fuel in the generation and heating of steam.	69	11th Jan. 1853	Joseph Beattie.
Improvements applicable to steam-generators -	84	12th Jan. 1853	George Augustus Huddart.
Steam-generators - - - -	135	19th Jan. 1853	Celestin Malo.
Improvements in steam-boilers - - -	208	27th Jan. 1853	William Galloway. John Galloway.
Combining metal plates for ship-building and other engineering constructions. (*Boilers.*)	235	29th Jan. 1853	Henry Batchelor.
Steam-boiler chimneys - - - -	257	31st Jan. 1853	Israel P. Magoon.
Construction of boilers and apparatus connected therewith.	272	1st Feb. 1853	Joshua Murgatroyd.
Steam-engines - - - - - (*Also boilers.*)	331	7th Feb. 1853	William Scott. Robert Brough. James Rinoe. Thomas Mann.
Manufacture of malleable iron and other metals - (*Generating steam by furnace-flue heat.*)	426	18th Feb. 1853	William Darling.
Steam-boilers - - - - -	447	21st Feb. 1853	John Charles Pearce.
Construction of locomotive boilers - - -	486	26th Feb. 1853	William Mackenzie Shaw.
Steam-boilers - - - - -	502	23th Feb. 1853	George Duncan.
Application of heat for generating steam and for general heating purposes - - -	513	1st March 1853	Charles Flude. James Waterman.
Construction of steam-boilers - - -	626	12th March 1853	Thomas Evans.
Generating steam and other vapours - -	690	21st March 1853	Moses Poole.
Rolling and shaping malleable metals - - (*Applicable for making boiler ends, plates, discs, and cones.*)	701	22nd March 1853	William Johnson.
Certain improvements in steam-boilers - -	728	26th March 1853	Thomas Smedley.
Apparatus for generating steam or other elastic fluid.	735	28th March 1853	David Stephens Brown.
Improvements in locomotive-engines - - (*Also boilers.*)	786	2nd April 1853	Sir James Caleb Anderson, Bart.
Apparatus for heating, applicable for generating steam or evaporating solutions, and may be applied for heating purposes generally.	826	6th April 1853	Henry Alfred Jowett.
Steam-boilers; mode of supplying the same with water.	884	12th April 1853	Alfred Vincent Newton.
Improvements in and applicable to boilers or apparatus for generating steam, and in apparatus connected therewith.	959	21st April 1853	Thomas Dunn.
Steam-boilers; appendages thereto - -	1021	27th April 1853	Thomas Culpin.
Improvements in steam-boilers - - -	1110	5th May 1853	Thomas Fearnley.
Economizing fuel by rendering available the heat from coke ovens, and applying the same to the generation of steam &c.	1176	12th May 1853	Joseph Sawtell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Improvements in steam-boilers - - -	1187	13th May 1853	Edward Taylor Bellhouse.
Improvements in steam-engines, which improvements are also applicable to the machinery or apparatus connected with steam-boilers.	1194	14th May 1853	Thomas Stephen Holt.
Charring peat and other vegetable substances; burning lime. (*Producing steam.*)	1229	18th May 1853	John Barsham.
Improvements in steam-boilers - - -	1247	20th May 1853	Charles Cowper.
Boilers or generators to be used in generating steam or gas for driving engines or for other purposes.	1251	20th May 1853	Auguste Edouard Loradoux Bellford.
Generation of steam - - - -	1285	25th May 1853	William Edward Newton.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids.	1363	3rd June 1853	Ferdinand Louis Gossart.
Improvements in steam-boilers - - -	1366	3rd June 1853	Isaiah Kendrick.
Method of obtaining steam-power - - -	1417	10th June 1853	Auguste Chesneau.
Construction of steam-boilers - - -	1433	13th June 1853	William David Paine. George Alfred Paine.
Manufacture of sheet iron and iron plates used for boilers and other like purposes.	1449	15th June 1853	Charles Wye Williams.
Steam-engines; production of steam for the same -	1491	18th June 1853	John Moore Hyde.
Construction of steam boilers or generators; arrangement of furnaces connected therewith.	1528	23rd June 1853	James Burrows.
Formation of such metallic plates as are required to be conjoined by rivetting or other similar fastening. (*For making boilers.*)	1529	23rd June 1853	James Burrows.
A new distilling-apparatus - - -	1531	23rd June 1853	Peter Armand le Comte de Fontainemoreau.
Steam-boilers - - - - -	1534	24th June 1853	Joshua Hornton.
Steam-boilers - - - - -	1561	28th June 1853	Auguste Edouard Loradoux Bellford.
Magneto-electric apparatus suitable for the production of motive-power, light, and heat. (*Generating steam.*)	1587	1st July 1853	Edward Clarence Shepard.
Improvements in steam-boilers - - -	1608	5th July 1853	Peter Erard.
Constructing boilers and other metallic structures -	1656	12th July 1853	Andrew Burns.
Improvements in steam-boilers - - -	1760	26th July 1853	Joseph Barrans.
Steam engines and boilers for marine purposes -	1775	29th July 1853	James Edward M^{c}Connell.
Improved boiler - - - - -	1829	5th Aug. 1853	William Smith. Thomas Phillips.
Generation of steam &c. - - - -	1848	8th Aug. 1853	William Hickson.
Steam engines and boilers - - -	1857	10th Aug. 1853	George Parsons.
Manufacture of coke; apparatus connected therewith; treating the products obtained therefrom. (*Communicated by Monsieur Guillaume Louis Edouard Buran.*)	1938	18th Aug. 1853	Auguste Mathieu Maurice de Bergevin.
Steam-engine boilers - - - -	1960	23rd Aug. 1853	Thomas Charles Medwin.
Manufacturing compost or manure - - (*Boiler.*)	1968	24th Aug. 1853	George Culverhouse.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Steam-boilers; apparatus applicable thereto and to be used therewith - - - - -	2029	2nd Sept. 1853	John Tayler. James Griffiths. Thomas Lees.
Construction of iron boilers and other like structures or articles.	2042	5th Sept. 1853	John Clare, junior.
Formation or construction of rolled metallic plates -	2069	8th Sept. 1853	James Burrows.
Boilers and furnaces for generating steam - -	2108	12th Sept. 1853	Joseph Maudslay.
Locomotive and other boilers for generating steam -	2118	13th Sept. 1853	Alexander Allan.
Generating steam in steam-boilers - - -	2137	14th Sept. 1853	Jacob Behrens.
Mode of constructing steam-boilers, applicable also in part to the construction of condensers.	2188	21st Sept. 1853	Alfred Vincent Newton.
Steam-engine boilers - - - -	2297	7th Oct. 1853	John Onions. Samuel Bromhead.
A system of production of caloric with or without combustible material. (*Generating steam.*)	2420	19th Oct. 1853	André Alexander Beaumont.
Steam-boilers; method of setting or fixing the same.	2441	22nd Oct. 1853	Harry Bentley.
Construction and arrangement of puddling-furnaces;—applicable to other furnaces used in the generation of steam. (*Generating steam from the waste heat.*)	2461	25th Oct. 1853	Joseph Beasley, junior.
Improvements in steam-boilers - - -	2467	25th Oct. 1853	Weston Grimshaw.
Construction of steam-boilers; mode or method of fixing the same.	2560	4th Nov. 1853	William Hindman.
An improvement in steam-boilers, which is applicable to other vessels for containing compressed air, vapour, or gas.	2585	7th Nov. 1853	Robert Roughton.
Construction of steam-boilers - - -	2596	9th Nov. 1853	Benjamin Dangerfield. Benjamin Dangerfield, junior.
Mode of constructing marine boilers - -	2660	16th Nov. 1853	James Bristow. Henry Attwood.
Manufacture of bar and sheet metals; machinery connected therewith; application of such metals to various useful purposes. (*For boilers.*)	2662	17th Nov. 1853	John Clark, junior.
Construction of steam boilers or generators -	2678	18th Nov. 1853	Amédée François Rémond.
Generating steam and consuming smoke - -	2793	1st Dec. 1853	Thomas Garnett. Daniel Adamson.
Improvements applicable to the plating of iron ships, also partly applicable to the construction of boilers.	2843	7th Dec. 1853	John Getty.
Boilers and furnaces - - - -	2882	10th Dec. 1853	Edward Green.
Obtaining motive-power - - - - (*Generating steam.*)	2912	15th Dec. 1853	Jean Baptiste Pascal.
An improved cooking-apparatus - - - (*Boiler.*)	2954	20th Dec. 1853	Adam Paterson.
Formation of such metallic plates as are required to be conjoined by rivetting or other similar fastening. (*Boiler plates.*)	2962	20th Dec. 1853	James Burrows.
Construction of steam boilers or generators; arrangement of furnaces connected therewith.	2963	20th Dec. 1853	James Burrows.

Subject-matter of Patent	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Setting out and marking the rivet-holes in the plates used in constructing boilers and other vessels.	2964	20th Dec. 1853	Archibald Thomson.
See also "FURNACES, &c." For Regulating Steam and Measuring Power—*see* "GAUGES, &c." For Preventing Boiler Explosions—*see* "ACCIDENTS."			
II.—Cleansing and Preventing Incrustation in Boilers.			
Apparatus for generating steam or other elastic fluid (*Removing incrustation from boilers.*)	735	28th March 1853	David Stephens Brown.
Apparatus for cleansing the interior of tubular boilers and other hollow articles.	943	19th April 1853	Frederick Henry Smith.
Preventing incrustation of steam-boilers - -	1321	28th May 1853	Edward Duclos de Boussois
Steam-engines and boilers for marine purposes -	1775	29th July 1853	James Edward M'Connell.
Construction of steam-boilers - - -	2596	9th Nov. 1853	Benjamin Dangerfield. Benjamin Dangerfield, junior.
III.—Water-feeding Apparatus for Boilers.			
Apparatus for admitting water to boilers - -	126	18th Jan. 1853	Thomas Lees. Squire Lees. John Lees. Thomas Lees, junior.
Steam-generators - - - - - -	135	19th Jan. 1853	Celestin Malo.
Steam-boilers; mode of supplying the same with water.	884	12th April 1853	Alfred Vincent Newton.
Improvements in the construction of locomotive engines;—partly applicable to other engines.	888	13th April 1853	William Pearce.
Steam-boilers; appendages thereto - - -	1021	27th April 1853	Thomas Culpin.
Machinery or apparatus applicable for pumping water and supplying steam-boilers with water, and maintaining the water therein at a proper level.	1239	19th May 1853	William Edward Newton.
Supplying water to steam-engine boilers - -	1299	26th May 1853	John Box.
Apparatus for supplying water to steam-boilers -	1471	16th June 1853	Benjamin Finch.
Apparatus for regulating the supply of water to steam and other boilers;—applicable also to regulating the supply of liquids to vessels and reservoirs in general.	1878	12th Aug. 1853	Samuel Adams.
Steam-engines; apparatus connected therewith -	2022	31st Aug. 1853	William Beckett Johnson.
Steam-engine boilers - - - -	2297	7th Oct. 1853	John Onions. Samuel Bromhead.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-ENGINES (*Stationary, Locomotive, and Marine.*)			
Motive-power engines; application of motive-power to the same.	12	3rd Jan. 1853	Edme Augustin Chameroy.
Obtaining motive-power	21	5th Jan. 1853	Jean Baptiste Pascal.
Steam-machinery used for driving piles, hammering, stamping, and crushing	102	14th Jan. 1853	Frederick Joseph Bramwell. Isham Baggs.
Steam-engines	120	18th Jan. 1853	John Thornborrow Manifold. Charles Spence Lowndes.
Steam-engines; applicable wholly or in part to pumps and other motive-machines.	136	19th Jan. 1853	Joseph Maudslay.
Steam engines and boilers	208	27th Jan. 1853	William Galloway. John Galloway.
Transmitting motive-power to machinery; regulating the action of rotary machines. (*Steam-engines.*)	239	29th Jan. 1853	William Constable.
Engines to be worked by steam or other fluid	258	31st Jan. 1853	Frederick Lawrence. William Davison. Alfred Lawrence.
Improved rotary engine	275	1st Feb. 1853	James Carter.
Steam-engines	331	7th Feb. 1853	William Scott. Robert Brough. James Rinoe. Thomas Mann.
Marine engines	346	9th Feb. 1853	John Seaward.
Steam-engines	356	10th Feb. 1853	James Anderson.
Rotary-engines	394	15th Feb. 1853	Adolphe Nicoll.
Emission or reaction engines	480	25th Feb. 1853	Henry Martyn Nicholls.
Construction of locomotive-engines	485	26th Feb. 1853	Jean Joseph Frechin.
Locomotive-engines	506	1st March 1853	Robert Stephenson, junior.
Steam-engines	525	2nd March 1853	Robert Waddell.
Improvements in locomotives, part of which improvements are applicable to other steam-engines.	533	3rd March 1853	Auguste Edouard Loradoux Bellford.
Steam-engines	558	5th March 1853	William Todd.
Apparatus for converting reciprocating into rotatory motion for steam-engines, and for other purposes.	578	8th March 1853	Charles Finlayson.
Steam-engines	667	18th March 1853	John Henry Johnson.
Steam-engines and pressure-regulating valves	668	18th March 1853	Malcolm Baxter.
Certain improvements in steam-engines	721	24th March 1853	William McNaught.
Engines to be worked by steam or any other elastic fluid.	735	28th March 1853	David Stephens Brown.
Steam-engines (*Marine*)	738	28th March 1853	John Scott, junior. George William Jaffrey.
Certain improvements in springs, and also in the modes of their application to railway-engines.	745	29th March 1853	Thomas Hill.
Locomotive-engines	786	2nd April 1853	Sir James Caleb Anderson, Baronet.
Certain improvements in steam-engines	787	2nd April 1853	George Holcroft. William Jennings Hoyle.
Steam-engines; apparatus connected therewith	797	4th April 1853	William Beckett Johnson.
Steam-engines (*Marine.*)	874	12th April 1853	Henry William Harman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-ENGINES, &c.—*continued.*			
Portable and locomotive steam-engines	886	13th April 1853	Nathaniel Clayton. Joseph Shuttleworth.
Improvements in the construction of locomotive-engines;—partly applicable to other engines.	888	13th April 1853	William Pearce.
Steam-engines	889	13th April 1853	Thomas Edwards.
Working the air-pumps of steam-engines	891	13th April 1853	Douglas Hebson.
Rotary steam-engine	938	19th April 1853	François George Sicardo.
Steam-engines	963	21st April 1853	James Petrie.
Steam-engines	1070	2nd May 1853	Honoré Mane.
Obtaining motive power	1077	3rd May 1853	Edward Thomas Bainbridge.
Marine steam-engines	1094	4th May 1853	John Scott Russell.
Obtaining motive-power	1141	10th May 1853	Frederick Lipscombe.
Direct-acting steam-engines with fixed cylinders	1171	11th May 1853	William Bull.
Rotatory engines	1184	13th May 1853	Charles Tetley.
Improvements in steam-engines, which improvements are also applicable to the machinery or apparatus connected to steam-boilers.	1194	14th May 1853	Thomas Stephen Holt.
Certain improvements in steam-engines	1201	14th May 1853	Peter Armand le Comte de Fontainemoreau.
Rotatory engines	1216	17th May 1853	Joseph Webb.
Steam-engines suitable for agricultural purposes, and to locomotion on common roads.	1240	19th May 1853	John Hippisley.
Rotary engines to be driven by steam or any vapour, fluid, or gas &c.	1251	20th May 1853	Auguste Edouard Loradoux Bellford.
Construction of locomotives	1305	27th May 1853	Claude Arnoux.
Condensing steam-engines	1331	30th May 1853	John Champney Bothamn.
Engines to be worked by steam &c.	1336	31st May 1853	George Goodlet.
Improvements in the mode of and in engines for applying motive-power.	1389	6th June 1853	Anthony Bernard Baron Von Rathen.
Revolving engine to be worked by steam &c.	1445	15th June 1853	Arthur Parsey.
Improvements in and applicable to steam-engines	1459	16th June 1853	Edward Walmsley. John Holmes.
Steam-engines; production of steam for the same	1491	18th June 1853	John Moore Hyde.
Certain improvements in railways and locomotives running thereon, which improvements facilitate the ascension of steep inclines.	1548	25th June 1853	Antoine Andraud.
Obtaining motive-power	1569	29th June 1853	John Imray.
Rotary-engines	1677	14th July 1853	John Yule.
Engines worked by steam, air, or fluids	1736	23rd July 1853	William Huntley.
Steam engines and boilers for marine purposes	1775	29th July 1853	James Edward M'Connell.
Certain improvements in steam-engines	1801	2nd Aug. 1853	John Griffiths.
Steam engines and boilers	1857	10th Aug. 1853	George Parsons.
Improvements in evaporating	1895	13th Aug. 1853	Frederick Lipscombe.
Rotatory steam-engines;	1908	15th Aug. 1853	Alexander Dalgety.
Steam-engines	1927	17th Aug. 1853	George Leedham Fuller.
Steam engines; apparatus connected therewith	2022	31st Aug. 1853	William Beckett Johnson.
Rotary engines to be worked by steam or other fluid.	2037	3rd Sept. 1853	Thomas Walker.
Engine to be worked by steam, &c.	2052	6th Sept. 1853	James Davis. Robert Ramsay.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-ENGINES, &c.—*continued.*			
Steam-engines	2093	10th Sept. 1853	Edwin Scragg.
Transmission of motive-power, being an improved substitute for the crank. (*Communicated by Jean Lasser and Edmond Heusschen.*)	2105	12th Sept. 1853	John Henry Johnson.
Certain improvements in steam-engines	2130	14th Sept. 1853	John Jonathan. George Collins.
Obtaining motive-power by the aid of steam and other expansive gases.	2173	19th Sept. 1853	John Stephens.
Certain improvements in steam-engines	2232	29th Sept. 1853	James Griffiths.
Steam-engines	2281	6th Oct. 1853	John Milner.
Steam-engines	2326	11th Oct. 1853	William Beardmore. William Rigby.
Obtaining and applying motive-power	2477	26th Oct. 1853	Freiderich Ludewig Hahn Danchell. William Startin.
Obtaining steam-power; regulating the same	2541	2nd Nov. 1853	Frederick Lipscombe.
Machinery for obtaining and applying motive-power, and for raising and forcing fluids.	2557	3rd Nov. 1853	Joseph Henry Tuck.
Improvements in and applicable to steam-engines	2571	5th Nov. 1853	Samuel Harrison.
Steam machinery and pumps for lifting water from mines and other places	2573	5th Nov. 1853	Charles Carr. William Kyle Horsley.
Steam-engines; apparatus for indicating the pressure of steam.	2577	5th Nov. 1853	William Beckett Johnson.
Steam-engines	2583	7th Nov. 1853	Jonathan Grinrod. Alexander Hunter.
A new rotatory steam-engine	2609	11th Nov. 1853	Alexandre Andre Victor Sarrazin de Montferrier.
An improvement in steam-engines	2672	18th Nov. 1853	Patrick Francis Keogh. William Ashley Wilson.
Improvements in surface-condensers, and in evaporators and heaters for steam engines.	2682	18th Nov. 1853	Moses Poole.
Certain improvements in marine steam-engines	2706	21st Nov. 1853	William Joyce. Thomas Meacham.
Steam-engines	2728	23rd Nov. 1853	William Beckett Johnson.
Rotatory engines	2740	24th Nov. 1853	Daniel Lancaster Banks.
Rotary engines	2751	25th Nov. 1853	Auguste Edouard Loradoux Bellford.
Obtaining motive-power by means of heated gases	2768	28th Nov. 1853	Prix Charles Jean Baptiste Sochet.
Atmospheric counterbalance slide-valve for the steam-engine, hydraulic and all other machines in which the slide-valve is used or required	2861	9th Dec. 1853	Duncan Christie. John Cullen.
Steam-engines; apparatus connected therewith	2866	9th Dec. 1853	James Sutcliffe.
Steam-engines	2872	9th Dec. 1853	John Bourne.
Obtaining and applying motive-power	2887	12th Dec. 1853	William Evans.
Obtaining motive-power	2912	15th Dec. 1853	Jean Baptiste Pascal.
Rotary steam-engine	3005	28th Dec. 1853	William Unett Coates.

See also "CYLINDERS, &c."
"PISTONS, &c."
"VALVES, &c."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEERING SHIPS; GUIDING CARRIAGES.			
A twin-stern ship or vessel with a protected propeller.	204	27th Jan. 1853	Alfred Barnes Shordee.
An improved propeller, as to affixing the blades in the boss, and affixing the bosses to the spindle or centre shaft; mode of placing, controlling, lowering, and detaching the same.	337	8th Feb. 1853	John Buchanan.
Propelling, steering, and regulating vessels -	424	18th Feb. 1853	Peter Madden.
Steering vessels; apparatus used therein - -	536	3rd March 1853	William Clark.
Improvements in locomotive-engines - - (*Steering steam-carriages on common roods.*)	786	2nd April 1853	Sir James Caleb Anderson, Bart.
Construction of vessels to be used chiefly at various depths under the surface of the water; machinery or apparatus connected therewith for steering the same, &c.	1281	25th May 1853	William Bauer.
Apparatus for steering vessels - - -	1371	3rd June 1853	William Edward Maude.
Construction of barges and vessels; mode of steering.	1460	16th June 1853	William Henry Grey Field.
Machinery for steering vessels - - -	1997	27th Aug. 1853	Josiah Hornblower.
A fortune rudder in bronze - - -	2436	21st Oct. 1853	Pierre Marie Fouque. Louis Réné Hébert. Vincent Etienne Doret le Marneur.
Steering-apparatus - - - -	2449	24th Oct. 1853	Thomas Stainton.
Steering-wheels - - - -	2699	21st Nov. 1853	John Scott, junior.
Propelling and steering vessels - - -	2822	5th Dec. 1853	William Simons.
Rudders - - - - -	2859	9th Dec. 1853	Pierre Marie Fouque. Louis Réné Hébert. Vincent Etienne Doret le Marneur.
STONE AND MARBLE; ARTIFICIAL STONE; HEARTH-STONES.			
Manufacture of a vitrified substance, and its application alone or in combination with mineral, earthy, and plastic substances, to various useful purposes in the arts, and for certain other new applications of known plastic substances. (*"Opaline" or imitation marbles.*)	7	1st Jan. 1853	Joseph Brough.
Manufacturing imitation stone, &c. by means of a machine and arrangements of machinery titled "a central, circular, and horizontal motion."	94	13th Jan. 1853	Edward Wills Uren.
Combining materials for cleansing or whitening stone. (*Hearth-stone.*)	187	25th Jan. 1853	Frederick Simpson
Treatment and preparation of certain natural or artificial stones, applicable to various useful and ornamental purposes.	1087	4th May 1853	Charles Videgrain.
Making perforated building-stone - -	1226	18th May 1853	Charles Clarkson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STONE, &c.—*continued.*			
Improvements in artificial and malleable stones; apparatus to be used for such purposes.	1519	21st June 1853	Juste Giret.
Manufacture of artificial stone and similar wares -	1666	13th July 1853	Frederick Ransome.
Method of forming designs and patterns upon papier-mâché, japanned iron, glass, metal, and other surfaces. (*Marble.*)	1714	19th July 1853	Charles Breese.
Manufacturing liquid quartz or silex, to be used in the manufacture of certain compositions for ornamental and useful purposes. (*Imitation marble.*)	2991	24th Dec. 1853	Harris Hardinge.
For Cutting Stone, *see* "CUTTING, &c."			
STORING, STACKING, AND LOADING GRAIN, HAY, AND STRAW.			
Storing and preserving grain - - -	1266	23rd May 1853	Amédée Devy.
Machinery for cutting and harvesting corn, grass, and other crops. (*And loading hay.*)	1349	2nd June 1853	Joseph Whitworth.
Machinery for raising and stacking straw, hay, corn, and other agricultural produce.	1369	3rd June 1853	James Hayes.
STRAPS, BANDS, AND BELTS.			
Manufacture of travelling cases, wrappers, and certain articles of dress hitherto manufactured of leather - - - - - - - (*Children's belts.*)	17	4th Jan. 1853	Joseph James Welch. John Stewart Margetson.
Medical portative electro-galvanic apparatus - - (*Belts.*)	23	5th Jan. 1853	Gustave Paul de l'Huynes.
Manufacture and treatment of leather, either alone or in combination with other materials. (*For making flat ropes or bands.*)	36	6th Jan. 1853	Robert Whinery.
Fastenings for bands, belts, straps, and other similar articles.	304	4th Feb. 1853	Frederick John Jones.
Manufacture of bands, straps &c. - - -	449	21st Feb. 1853	William Wilkinson.
Strap or band for connecting together certain parts of harness and saddlery, applicable also to other purposes where straps or bands are used.	594	9th March 1853	Samuel Blackwell.
Manufacture of life-belts - - - -	676	18th March 1853	Alfred Warn Banks.
Improvements in locomotive engines - - (*Driving straps or ropes.*)	786	2nd April 1853	Sir James Caleb Anderson, Bart.
Mill-bandings &c. - - - -	917	15th April 1853	William Wilkinson.
Plastic compound applicable to various ornamental and useful purposes. (*For making straps.*)	1260	21st May 1853	Henri Joseph Scoutetten.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STRAPS, &c.—*continued.*			
Combining materials for making a more perfect fabric for mill-bands and for all other similar purposes to which the same may be applied.	1326	30th May 1853	George Wells.
Means of depriving caoutchouc of all unpleasant odour and of imparting to it various agreeable perfumes.	1982	26th Aug. 1853	Eugène de Varroc.
Manufacture of flexible bands &c. - - -	2166	17th Sept. 1853	Christopher Nickels. Ralph Selby.
Bands, belts, and straps - - - -	2324	11th Oct. 1853	William Wilkinson.
Mill-banding - - - -	2507	31st Oct. 1853	John Turner Wright. Edwin Payton Wright. William Asbury.
Bands for binding more effectually than heretofore packets or parcels of lace and other articles.	2726	23rd Nov. 1853	James Dilks.
Mode of or a new arrangement of straps for slinging knapsacks.	2729	23rd Nov. 1853	John Drumgoole Brady.
Belts or bands for driving machinery, for use in mines and for other purposes.	2936	16th Dec. 1853	Robert William Waithman.
Compositions to be used as substitutes for caoutchouc, gutta-percha, and certain fatty bodies. (*For driving-straps.*)	3045	31st Dec. 1853	Stanislas Tranquile Modeste Sorel.
SUGAR AND SYRUPS; BREAKING SUGAR; SUGAR-TONGS.			
Apparatus for refrigerating - - - (*Producing crystals.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Treatment and preparation of saccharine substances; machinery or apparatus connected therewith. (*Purifying.*)	414	17th Feb. 1853	William Pidding.
Manufacture and refining of sugar - - -	420	17th Feb. 1853	William Hawes.
Refining sugar; preparing materials applicable to that purpose - - - - -	431	19th Feb. 1853	Frank Clarke Hills. George Hills.
Manufacture and refining of sugar - - -	487	26th Feb. 1853	Joseph Brandeis.
Whitening and cleansing sugar by the application of steam and hot air in a centrifugal sugar-machine. (*Communicated by Victor Van Goethem.*)	633	14th March 1853	The Right Honourable Charles Augustus Lord Howard de Walden and Seaford, G.C.B.
Machinery for crushing sugar-canes - -	851	8th April 1853	Henry Oliver Robinson.
Evaporating saccharine fluids - - -	878	12th April 1853	Thomas Greenwood.
Extraction and manufacture of sugar and saccharine matters.	1062	2nd May 1853	Auguste Edouard Loradoux Bellford.
An improvement in refining sugar - -	1131	7th May 1853	Conrad William Finzel.
Method of extracting the juice from the sugar-cane	1243	19th May 1853	John Thornborrow Manifold. Charles Spencer Lowndes. John Jordan.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids. (*Making sugar.*)	1363	3rd June 1853	Ferdinand Louis Gossart.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SUGAR, &c.—*continued.*			
Manufacture and refining of sugar - -	1364	3rd June 1853	James Mayelston.
Mode of manufacturing metallic handles for knives and forks, backs for razors, bows for scissors, and the relative parts of such like instruments. (*Sugar-tongs.*)	1428	13th June 1853	William Smith.
Mode of making with iodine and its compounds, in combination with substances containing extractive principles, various elementary combinations. (*Syrups.*)	1487	18th June 1853	Jacques François Dupont de Bussac.
Manufacturing and refining sugar - - -	1510	20th June 1853	Robert Galloway.
Process of refining and manufacturing sugar -	1687	15th July 1853	Henry Bessemer.
Manufacture and treatment of bastard sugar and other low saccharine products, such as are obtained from molasses and scums.	1689	15th July 1853	Henry Bessemer.
Manufacture and refining of sugar - - -	1691	15th July 1853	Henry Bessemer.
Preparation of a black powder from coal; application thereof to the manufacture of paints, blacking, and various other purposes. (*Charcoal for refining.*)	1900	13th Aug. 1853	John Gwynne.
Preparation of beetroot for the manufacture of sugar, applicable to other purposes - -	1902	13th Aug. 1853	John Gwynne. James Egleson Anderson Gwynne.
Treatment of lignite or wood-coal; obtaining various useful products therefrom, (*Charcoal for decolourizing.*)	2343	12th Oct. 1853	Edme Jules Maumené.
Making and refining sugar; treating saccharine fluids.	2358	13th Oct. 1853	John Thomas Way.
Use and preparation of certain solid and liquid substances for the defecation, purification and decolourization of saccharine juices and syrups or solutions, and for neutralizing, decomposing, and absorbing noxious and fetid gases.	2693	19th Nov. 1853	Thomas Isaac Dimsdale.
Apparatus for sawing and breaking sugar - -	2777	29th Nov. 1853	Louis Alexandre Michel.
Improvements in sugar-refining - - -	2809	2nd Dec. 1853	Robert Reyburn.
Manufacture and refining of sugar - -	2811	2nd Dec. 1853	Henry Bessemer.
Extracting and treating the juice of beetroot and other vegetables.	2855	8th Dec. 1853	Philippe Joseph Toussaint Bordone.
Manufacture and refining of sugar - -	2898	14th Dec. 1853	Edward Beanes.
SULPHUR.			
Manufacture of carbonate of soda and potash - (*Also sulphur.*)	321	5th Feb. 1853	Charles Fréderic Werckshagen.
Purification of coal-gas for the purposes of illuminating and heating; obtaining by the ingredients used therefor, sulphur &c.	1258	21st May 1853	William Chisholm.
Recovery of sulphur from alkali waste - -	1877	11th Aug. 1853	Hugh Lee Pattinson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SURVEYING, LEVELLING; MEASURING ANGLES AND DISTANCE OF OBJECTS.			
An improved goniometric protractor, or instrument for setting out and measuring angles and other geometric figures. (*Communicated by Charles Gordon.*)	232	29th Jan. 1853	Charles Dickson Archibald.
An improved goniometric protractor, or instrument for setting out and measuring angles and other geometric figures.	416	17th Feb. 1853	Charles Gordon.
Marine and surveying compasses - -	665	18th March 1853	Paul Cameron.
Method of finding and indicating the measurements of the sines and cosines of the arcs of circles or other peripheries.	1661	13th July 1853	Henry Montague Grover.
Nautical and surveying instruments - -	1681	15th July 1853	George Gowland.
Manufacture of tablets and dial-plates applicable to compasses &c.	1786	1st Aug. 1853	John Smeeton.
Apparatus for levelling - - - - -	2537	2nd Nov. 1853	William Armand Gilbee.
Improvement or addition to augment convenience by transformation and facility, the different lines required in the erection or manufacturing edifices or structures, by apparatus, tools, or instruments suitable for the different capacities of operatives and general surveying.	2830	6th Dec. 1853	John Mold.
Telescopes and other glasses in their application to the measurement of distances.	2848	8th Dec. 1853	Benjamin Solomons.
Instruments for ascertaining heights and distances, and for levelling.	2917	15th Dec. 1853	Ferdinand Denis Gibory.
SWIMMING-BELTS, FLOATS, AND DRESSES; PREVENTION OF DROWNING.			
Manufacture of life-belts - - - - -	676	18th March 1853	Alfred Warn Banks.
Ocean floats which are designed to save lives and light treasures from shipwreck.	958	21st April 1853	Anthony Deale.
Apparatus for sustaining bodies in the water -	1013	27th April 1853	John Henry Johnson.
Improvements in life-preservers - - - (*A folding-chair.*)	2180	20th Sept. 1853	Moses Poole.
Apparatus for throwing out ropes or lines for the better preservation of life and property. (*Firing from a cannon.*) (*Communicated by Monsieur d'Houdetot.*)	2237	30th Sept. 1853	John Henry Johnson.
Apparatus for sustaining bodies in the water - (*Communicated by Jacques Lefevre.*)	2429	21st Oct. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SWORDS AND BAYONETS; SWORD-SLINGS.			
Strap or band for connecting together certain parts of harness and saddlery, applicable also to other purposes where straps or bands are used. (*Sword and gun slings.*)	594	9th March 1853	Samuel Blackwell.
Swords - - - - - - - -	980	21st April 1853	Charles Reeves.
Mode of manufacturing metallic handles for knives and forks, backs for razors, bows for scissors, and the relative parts of such like instruments.	1428	13th June 1853	William Smith.
Manufacture of swords, bayonets, and sword-bayonets.	2550	3rd Nov. 1853	Charles Reeves, junior.
TEA AND COFFEE POTS, CADDIES AND CANISTERS; MAKING INFUSIONS.			
Apparatus for making vegetable and other infusions and solutions.	931	18th April 1853	Richard Ford Sturges.
Canisters - - - - - - -	1241	19th May 1853	John Ames Gilbert.
Obtaining infusions and decoctions; vessels or apparatus employed therein.	1481	17th June 1853	John Piddington.
Vessel to be used for the purposes of infusion and decoction, heating liquids and melting glutinous substances.	1595	4th July 1853	Gabriel Didier Fevre.
Apparatus for making tea and coffee, and other infusions or decoctions for chemical and other purposes.	1715	20th July 1853	John Robison.
Tea-caddies and similar articles; arrangements and fittings thereof.	1859	10th Aug. 1853	John George Taylor.
Improved coffee-pot - - - - -	2492	27th Oct. 1853	Edward Loysel.
TELEGRAPHS; TRACING TELEGRAPHIC COMMUNICATIONS; INSULATING, COATING, AND LAYING WIRES.			
Method of manufacturing steel and of carburising iron - - - - - - (*Insulating converting troughs.*)	5	1st Jan. 1853	Joseph John William Watson. William Prosser.
Electric telegraphs; instruments used in connection therewith.	96	13th Jan. 1853	John Walker Wilkins.
Manufacture of tubes; application of tubes to certain purposes - - - - - -	110	17th Jan. 1853	Thomas Potts. James Septimus Cockinga.
Construction of knobs, handles, and other articles of glass, earthenware, and other vitreous and semi-vitreous substances; attaching the same to doors, drawers, and other articles. (*Applicable to insulators.*)	149	21st Jan. 1853	Eliezer Edwards.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TELEGRAPHS, &c.—*continued.*			
Covering, laying, and uniting wires and ropes for telegraphic purposes; machinery employed therein.	185	25th Jan. 1853	William Thomas Henley.
Diving-bells and apparatus to be used in connection therewith. (*Coffer-dam for laying wires.*)	231	29th Jan. 1853	Richard Archibald Brooman.
Protecting telegraph wires - - -	338	8th Feb. 1853	Thomas Allan.
Apparatus for holding and protecting insulated telegraphic wires.	405	16th Feb. 1853	John Day.
Certain new combinations of gutta-percha with other materials; method of applying such for use. (*Protecting insulated wires.*)	906	14th April 1853	John Wallace Duncan.
Apparatus for testing the insulation of electric telegraph wires.	1023	27th April 1853	William Reid.
Electric telegraph apparatus - - -	1155	11th May 1853	Jacob Brett.
Construction of vessels to be used chiefly at various depths under the surface of the water; machinery or apparatus connected therewith for propelling, balancing, and steering the same, and for carrying on operations of various kinds on or under the surface of the water, from within, upon objects without such vessels. (*Laying telegraphic wires.*)	1281	25th May 1853	William Bauer.
Method of making and laying down submarine and other telegraph cables;—applicable for the making of ropes and cables generally.	1312	28th May 1853	William Smith.
Machinery for perforating or punching paper, card, and other materials. (*For telegraphic purposes.*)	1350	2nd June 1853	Joseph Whitworth.
Telegraphic apparatus - - -	1465	16th June 1853	Joseph Ilsley.
Electric telegraphic instruments - - -	1664	13th July 1853	William Williams.
Modes of protecting wires for telegraphs - -	1779	30th July 1853	William Thomas Henley.
Means or processes for preserving metals from corrosion.	1789	1st Aug. 1853	John Carvalho de Medeiros.
An important domestic telegraph - -	1860	10th Aug. 1853	Jean Pierre Albert Galibert.
Electric conductors; means of insulating electric conductors.	1889	12th Aug. 1853	Thomas Allan.
Electric telegraphs - - - -	1909	15th Aug. 1853	George Edward Dering.
Obtaining power by the aid of an electric current, for motive and telegraphic purposes.	2032	2nd Sept. 1853	Augustino Carosio.
Manufacture of flexible tubes and bands; covering wire - - - - - - -	2166	17th Sept. 1853	Christopher Nickels. Ralph Selby.
Protecting telegraph wires - - -	2307	8th Oct. 1853	William Wilkinson.
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for telegraphic wires &c.	2340	12th Oct. 1853	Nicholas Callan.
An invention for electric telegraph purposes, being an improved printing and signal electric telegraph, with electric alarm attached - -	2345	12th Oct. 1853	Henry Mapple. Daniel Moore Mapple.
Means of insulating wire - - - -	2371	14th Oct. 1853	John Farrell.
Means of obtaining telegraphic communications, applicable to armies in the field.	2372	14th Oct. 1853	The Honourable Frederick William Cadogan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TELEGRAPHS, &c.—*continued.*			
Improvements in galvanic batteries - -	2486	27th Oct. 1853	George Edward Dering.
Electric telegraphs - - - -	2846	8th Dec. 1853	William Thomas Henley.
Improvements in effecting telegraphic communications.	2885	12th Dec. 1853	Edward Orange Wildman Whitehouse.
Insulating wire used for electric telegraphs, with a view to obviate the effects of return or inductive currents.	2956	20th Dec. 1853	Josiah Latimer Clark.
Insulators for insulating the wires or rods employed for conducting or transmitting electricity.	3007	28th Dec. 1853	Richard Green.
Electric telegraphs and apparatus connected therewith. (*Also insulators.*)	3031	31st Dec. 1853	Henry Vernon Physick.
TESTING AND ESSAYING.			
Apparatus for refrigerating - - - (*Applicable for proving wine, alcohol, milk &c.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Machinery or apparatus for testing or ascertaining the strength of yarn, thread, wire, strings, or fabrics.	251	31st Jan. 1853	Louis Guillaume Perreaux.
Apparatus for testing the insulation of electric telegraph wires.	1023	27th April 1853	William Reid.
Method of making and laying down submarine and other telegraph cables;—applicable for the making of ropes and cables generally.	1312	28th May 1853	William Smith.
Apparatus for regulating the temperature of stoves and furnaces, and of water, air, or other fluids contained in vessels or chambers, the strength of spirituous liquors and of chemical mixtures, and the hygrometric state of the air in buildings, rooms &c.	2448	24th Oct. 1853	Henry Kraut.
THERMOMETERS, BAROMETERS, HYGROMETERS.			
A thermostat or apparatus for the regulation of temperature and of ventilation.	42	6th Jan. 1853	William Sykes Ward.
Barometer and steam-gauge - - -	196	26th Jan. 1853	Antoine Galy Casalat.
Improvements in barometers;—partly applicable to the registry of other fluctuations than those of barometers.	243	31st Jan. 1853	David Stephens Brown.
Production of spirits; stills and apparatus employed therein. (*Thermal regulators.*)	468	24th Feb. 1853	Charles Flude.
Improvements in thermometers - - - (*Applicable also as hygrometers or pluviometers.*)	948	19th April 1853	Edward Vivian.
Instruments for measuring the pressure and temperature of air, steam, and other fluids.	989	25th April 1853	Charles Léon Desbordes.
Manufacture of tablets and dial-plates applicable to barometers &c.	1788	1st Aug. 1853	John Smeeton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
THERMOMETERS, &c.—*continued.*			
Application of heat for baking and drying purposes; generation of steam. (*And heat indicators.*)	1848	8th Aug. 1853	William Hickson.
Construction of thermometers and other like indicators.	1890	12th Aug. 1853	William Littell Tizard.
Thermometers and other like indicators - - (*Talc tubes.*)	2280	5th Oct. 1853	William Littell Tizard.
Apparatus for regulating the temperature of stoves and furnaces, and of water, air, or other fluids contained in vessels or chambers, the strength of spirituous liquors and of chemical mixtures, and the hygrometric state of the air in buildings, rooms &c.	2448	24th Oct. 1853	Henry Kraut.
THIMBLES.			
Desks, work-boxes, dressing-cases, tea-caddies, and similar articles; arrangements and fittings thereof. (*Also covering thimbles.*)	1859	10th Aug. 1853	John George Taylor.
Machinery for manufacturing thimbles - -	2175	20th Sept. 1853	Samuel Walker, junior.
Certain mechanical arrangements for raising thimbles, the same to be worked by steam, water, or other power, thereby superseding hand-labour.	2656	16th Nov. 1853	David Pratt.
THRASHING, WINNOWING, DRESSING (*Corn and Seeds*).			
Method of preparing, cleaning, drying, and otherwise treating wheat, pulse, seeds, and other grain.	32	6th Jan. 1853	Edward Hutchinson.
Process for simultaneously removing dust, stones, or other foreign matter, and for separating the superior and inferior grains in wheat, barley, and malt.	400	16th Feb. 1853	Henry Stephen Ludlow.
Machinery for thrashing and winnowing corn and other agricultural produce.	464	24th Feb. 1853	William Spence.
Thrashing-machinery - - - - -	466	24th Feb. 1853	Peter M'Lellan.
Appendages to portable machines for thrashing, shaking, and winnowing corn.	597	9th March 1853	Joseph Shuttleworth.
Machines for thrashing seeds and grains, and for cleaning them from the straw and chaff after they are thrashed—"Palmer's American seed and grain thrasher and winnower." (*Also cleansing rice and peas.*)	866	11th April 1853	William Russell Palmer.
Mode of constructing the breasting to the revolving drums or beaters of thrashing-machines.	921	16th April 1853	Phillip Davis.
Manufacture of thrashing-machines - -	969	22nd April 1853	James Davis.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
THRASHING, &c.—*continued.*			
Thrashing-machines, and apparatus connected therewith for shaking the straw, riddling, winnowing, and dressing the corn.	1072	3rd May 1853	George Thomas Holmes.
Screens or machinery for cleaning wheat and other grain.	1517	21st June 1853	Thomas Wilson.
Winnowing or corn-dressing machines - -	1550	25th June 1853	George Josiah Mackelcan.
Machinery for thrashing, winnowing, and dressing corn, grain, and seeds.	1586	1st July 1853	George Parsons.
Apparatus for cleansing and separating corn, grain, and other seeds.	1732	22nd July 1853	John Gillam.
Improvements in thrashing-machines - -	1764	27th July 1853	Francis Arding.
Machinery or apparatus for washing, scouring, cleansing, or steaming, corn, roots, seeds, or similar matters.	1823	4th Aug. 1853	Charles Butler Clough.
Machinery for cleaning grain and seeds - -	2014	30th Aug. 1853	William Edward Newton.
Thrashing-machines; apparatus connected therewith (*Cleaning the grain.*) (*Communicated by Germain Sommeiller.*)	2284	6th Oct. 1853	John Henry Johnson.
Machinery for thrashing or separating the stem and husk from the grain or seed of wheat, barley, flax, and other plants.	2291	7th Oct. 1853	George Ellins.
Winnowing or dressing corn - - -	2331	11th Oct. 1853	James Hall Nalder. John Thomas Knapp.
Construction of spike thrashing-machines, whereby all liability to and danger of accident in their use is removed and prevented.	2529	1st Nov. 1853	William Russell Palmer.
Winnowing or corn-dressing machines - -	2998	27th Dec. 1853	George Josiah Mackelcan.
Portable thrashing-machines, also applicable to fixed thrashing-machines.	3034	31st Dec. 1853	Weston Tuxford.
TOYS.			
Manufacture of toys, models, and other like articles of ornament or utility.	554	5th March 1853	Mary Ann Smith.
Apparatus to be employed in games of chance -	703	22nd March 1853	Frederick Futvoye.
A new system of trigger applied to play arms, such as pistols, fusils, rifles, guns.	1102	5th May 1853	Charles Larbaud.
Play arms, play cannons, pistols, and guns - -	1344	1st June 1853	Jacques Louis Lemaire-Daime.
Means of depriving caoutchouc of all unpleasant odour and of imparting to it various agreeable perfumes. (*For balls &c.*)	1982	26th Aug. 1853	Eugène de Varroc.
Manufacture or production of useful toys - -	2915	15th Dec. 1853	Benjamin Whitaker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TROUSERS, DRAWERS, WAISTCOATS.			
Vulcanized india-rubber springs for trousers and breeches, with instructions to adjust the same.	2	1st Jan. 1853	Henry Bentley.
Improvements in circular frames and in the fabrics and articles produced thereon. (*Drawers &c.*)	45	7th Jan. 1853	Thomas Pape.
Manufacture of hats, caps, and bonnets;—applicable to other articles of wearing-apparel. (*Linings or stiffeners in waistcoats &c.*)	268	31st Jan. 1853	Thomas Charles Clarkson.
Machinery for the manufacture of looped fabrics (*Drawers and jackets.*)	458	23rd Feb. 1853	Edwin Stanley Brookes. Joseph Black. George Stevenson. William Jones.
An improvement in trousers, to supersede the use of braces;—applicable to other articles of apparel. (*As waistcoats.*)	2211	26th Sept. 1853	Henry Winter.
Trousers and similar articles of dress	2294	7th Oct. 1853	James Ferguson. James Lillie.
TRUSSES.			
Medical portative electro-galvanic apparatus	23	5th Jan. 1853	Gustave Paul de l'Huynes.
Abdominal supporters	1315	28th May 1853	Richard Archibald Brooman.
Construction of apparatus to be used as a chest-expander and as a uterine or abdominal supporter.	1398	7th June 1853	Alfred Vincent Newton.
Trusses for the cure or alleviation of hernia	1700	16th July 1853	Jacques Rives.
Apparatus to be used as a chest-expander and as a uterine or abdominal supporter.	2735	24th Nov. 1853	Alfred Vincent Newton.
An improved truss	2756	26th Nov. 1853	William Crofton Moat.
TURNING; LATHES FOR TURNING.			
Manufacture and application of dowels and machinery connected therewith;—parts of which machinery are applicable to other purposes. (*Lathes for turning.*	429	18th Feb. 1853	Nathan Dutton.
Improvements in lathes and parts connected therewith for the purpose of reducing and smoothing the surfaces of certain metal wares.	859	9th April 1853	William Penn Cresson.
Improvements in turning-lathes;—partly applicable to other useful purposes.	1410	9th June 1853	William Muir.
Machinery and apparatus for grinding and turning metals	1502	20th June 1853	Hiram Barker. Francis Holt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TURNING, &c.—*continued.*			
Manufacture of lasts; machinery connected therewith;—partly applicable to other like purposes of eccentric turning.	1564	29th June 1853	Thomas Edward Irons.
Manufacture of wooden rollers or cylinders -	1565	29th June 1853	Frederick Steiner.
Improvements in lathes and in apparatus connected therewith, for cutting, turning, or boring wood, metal or other substances.	2103	12th Sept. 1853	William Weild.
Mode of manufacturing china and earthenware articles on the lathe.	2139	14th Sept. 1853	William Nash.
Improvements in lathes - - -	2204	24th Sept. 1853	Alexander Dalgety.
Cutting tools; working of iron, brass, and other metals, and wood and other materials - -	2526	1st Nov. 1853	John Whitehead. Thomas Whitehead.
Spindles and bearings of lathes - - -	2580	7th Nov. 1853	John Todd.
TURNING OVER LEAVES OF BOOKS, &c.			
Turning over the leaves of books, music, and engravings; apparatus for effecting the same. (*Communicated by Claude Desbeaux.*)	1563	28th June 1853	John Henry Johnson.
Apparatus for holding and turning over the leaves of music or music-books.	1645	11th July 1853	George Ager.
TYPE FOUNDING AND MAKING.			
Manufacturing typographic characters - -	566	7th March 1853	André Calles.
Improvements in printing - - - - (*Making types.*)	737	28th March 1853	Thomas James Perry.
Method of manufacturing letters and figures to be used as printing-type, lettering for sign and window boards, and other such like purposes.	810	5th April 1853	William Mavity.
Manufacture of printers' type, and other articles used in letterpress printing.	864	11th April 1853	William Urquhart.
Type and articles used in letterpress printing -	1351	2nd June 1853	John Robert Johnson.
Manufacturing typographic characters - -	2049	6th Sept. 1853	André Calles.
Mode or method of cutting and finishing brass rule and weod reglet used in the art or process of letterpress printing and other similar purposes; machinery or apparatus employed therein	2073	9th Sept. 1853	Philip Grant. John Doherty.
Typographic printing - - - - - (*And forming type.*)	2413	19th Oct. 1853	William Little.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
UMBRELLAS, PARASOLS, AND WALKING-STICKS; UMBRELLA-FURNITURE.			
Umbrellas and parasols - - - -	188	25th Jan. 1853	John Sangster.
Manufacture of parasols - - - -	287	2nd Feb. 1853	Ismael Isaac Abadie. Henri Lauret.
Joints for the sticks of parasols and other like purposes. (*Communicated by Alexander Porecky.*)	462	23rd Feb. 1853	Adam Cyrus Engert.
An improvement in the frames of umbrellas and parasols.	739	28th March 1853	Samuel Fox.
Umbrellas and parasols - - - -	1179	13th May 1853	Joseph Stayner Eidmans.
Manufacture of umbrellas and parasols - -	1288	26th May 1853	Alexander Porecky.
An instrument or apparatus termed "A solar watch." (*A portable sun-dial, fitted into the head of a walking-stick.*) (*Communicated by Philipe Henri Matthey Doret.*)	1551	25th June 1853	Alfred Sandoz.
Improvements in walking-stick umbrellas, applicable also to parasols.	1635	9th July 1853	Thomas Restell.
Joint for umbrella and parasol sticks - -	1638	9th July 1853	Henry Hoskyn Peppin.
Improvements applicable to the manufacture of umbrella and parasol sticks, and other such like articles - - - - -	2054	6th Sept. 1853	Alfred Sommerville. Charles Twigg.
Umbrellas and parasols - - - -	2065	8th Sept. 1853	Robert Harrington.
Manufacture of umbrella and parasol furniture - (*Runners and top notches.*)	2289	6th Oct. 1853	John Rubery.
Case or cover for umbrellas, which can also be worn as a garment.	2485	27th Oct. 1853	Thomas Dawson.
Manufacture of open caps for sticks of umbrellas and parasols.	2575	5th Nov. 1853	John Rubery.
Manufacture of fabrics made of silk, cotton-wool, flax, hemp, straw, grasses, fibres, mohair and other hair, spun-glass, and enamelled, glazed, or plain wire; application of some of those materials; machinery or apparatus connected therewith. (*For parasols.*)	2602	10th Nov. 1853	William Pidding.
Manufacture of umbrellas and parasols - -	2911	15th Dec. 1853	Aignan Bernard Callier.
UPHOLSTERY; TREATING FEATHERS.			
Garments for travelling - - - - (*Also a cushion or seat.*)	325	5th Feb. 1853	Henry John Nicoll.
Mode of giving flexibility to beds, sofas, seats, and other similar articles.	382	14th Feb. 1853	Peter Armand le Comte de Fontainemoreau.
Treating sheets of caoutchouc or gutta-percha so as to render the same fit for ornamental coverings. (*For ottomans, carpets, and hangings.*)	598	9th March 1853	William Pidding.
Ornamenting surfaces or fabrics applicable to various useful purposes, such as for covers of furniture, imitation tapestry, carpets or hangings.	857	9th April 1853	Herbert Taylor.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
UPHOLSTERY, &c.—*continued.*			
Cases for containing hats in churches and similar situations. (*Hassocks.*)	947	19th April 1853	Edward Vivian.
Production of lace and other fabrics (*Curtains and chair-covers.*)	1002	26th April 1853	Auguste le Roy. Jean le Roy. Eugène Pavy.
Treating feathers and other animal matters for softening and otherwise improving the quality of the same.	1198	14th May 1853	Francis Montgomery Jennings.
Elastic spring beds, mattresses, cushions, and all kinds of spring stuffing for upholstery work generally, making them lighter and more portable.	1325	30th May 1853	Joseph Brown.
Sofa springs, useful for spring stuffed upholstery work generally; adaptation thereof to mattresses.	1652	12th July 1853	Joseph Bacon Finnemore.
Manufacture of beds, seats, and other hollow flexible articles to contain air.	1695	15th July 1853	Charles Goodyear.
Construction of portable metallic folding bedsteads, chair-bedsteads, chairs, sofas, couches, settees, and such like articles for the use of emigrants and others &c. (*Mattresses.*)	1710	18th July 1853	Samuel Perkes.
Means of carrying, bedding, and bathing the injured, ill, or invalid persons.	1826	4th Aug. 1853	Barthelemy Louis François Xavier Flechelle.
Means of depriving caoutchouc of all unpleasant odour and of imparting to it various agreeable perfumes. (*For air-cushions.*)	1982	26th Aug. 1853	Eugène de Varroc.
New description of cloth or fabric applicable to most purposes to which woven and knitted fabrics are applied (*For sacking.*)	1996	27th Aug. 1853	Edward Lacey. William Wilkinson.
Application of the fibrous part of the palm tree and leaf to arts and manufactures. (*For making mattresses and bedding.*)	2089	10th Sept. 1853	Arthur Warner.
An elastic spring contained in a cylindric tube or tubular case, the lid of which moves up and down according to the pressure. (*For cushions and mattresses.*)	2443	22nd Oct. 1853	Jean François Mermet.
VALVES AND TAPS; DRAWING OFF LIQUIDS; STEAM-ENGINE AND OTHER VALVES.			
Taps and other apparatus for filtering and drawing off liquids.	1	1st Jan. 1853	William Wilkinson.
Atmospheric engines (*Valves.*)	20	5th Jan. 1853	William Edward Newton.
Cocks or taps	129	19th Jan. 1853	William Vincent.
Steam-generators	185	19th Jan. 1853	Celestin Malo.
Taps and cocks	146	20th Jan. 1853	Augustus Thomas John Bullock.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES, &c.—*continued.*			
Raising and forcing water and other fluids (*Valves.*)	192	25th Jan. 1853	Henry Habberley Price.
Improved valve for steam and gas engines	194	26th Jan. 1853	Theodore Dwight Davis.
Ships' fire-engines (*Valves.*)	236	29th Jan. 1853	James Shand.
Improvements in cocks or taps	285	2nd Feb. 1853	John Verinder Kiddle.
Expansion valves for steam-engines	288	2nd Feb. 1853	Richard Archibald Brooman.
Regulating the combustion of gas	297	3rd Feb. 1853	John Henry Johnson.
Steam-engines (*Safety-valves.*)	331	7th Feb. 1853	William Scott. Robert Brough. James Rinoe. Thomas Mann.
Pumps or apparatus for raising and forcing fluids (*Valves.*)	343	9th Feb. 1853	William Binks. Samuel Bennett. Thomas Storey.
Lubricating mechanism (*Regulating-valves.*)	344	9th Feb. 1853	John Little.
Certain improvements in valves applicable to the receiving and discharging of water or other fluids	445	21st Feb. 1853	Thomas Bell. Richard Chrimes.
Steam-engines (*Valves.*)	525	2nd March 1853	Robert Waddell.
Improvements in locomotives, part of which improvements are applicable to other steam-engines. (*Safety-valves.*)	533	3rd March 1853	Auguste Edouard Loradoux Bellford.
Controlling and regulating the flow or pressure of gas. (*Valve.*)	549	4th March 1853	Samuel Hazard Huntly.
Portable fire-engine (*Lift-valve.*)	557	5th March 1853	Thomas Wells Cross.
Life-boats (*Self-acting valves.*)	563	7th March 1853	William Barrington.
Apparatus for producing and applying current electricity;—partly applicable for obtaining and treating certain chemical products resulting from electrolytic action. (*Valves for electro-galvanic batteries.*)	634	14th March 1853	William Edwards Staite.
Steam-engines and pressure-regulating valves	668	18th March 1853	Malcolm Baxter.
Rolling and shaping malleable metals (*Applicable for making valve covers.*)	701	22nd March 1853	William Johnson.
Certain improvements applicable to the safety-valves of steam boilers or generators.	705	23rd March 1853	James Allen.
Waterclosets and urinals (*Duplex valve.*)	706	23rd March 1853	John Henry Park. Joseph Park.
Self-acting plug for barges, boats, and other vessels	724	26th March 1853	Erasmus Symonds.
Cocks for drawing off beer or other liquids	749	29th March 1853	Isaac Rider.
Certain improvements in steam-engines	787	2nd April 1853	George Holcroft. William Jennings Hoyle.
Safety-valves for steam-boilers and gas-chambers	844	8th April 1853	George Frederick Goble.
Self-acting safety-valve for locomotive, marine, and other steam-boilers.	847	8th April 1853	George Humphrey.
Filling vessels with aërated waters; apparatus employed therein. (*Tubular valve.*)	876	12th April 1853	Auguste Mondollot.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES, &c.—*continued.*			
Improvements in steam-engines	889	13th April 1853	Thomas Edwards.
Fittings of bilge pumps and injection cocks of iron steamers and sailing vessels.	913	14th April 1853	Alexander Crichton.
Improvements in cocks	928	16th April 1853	Henry Wilks.
Arrangement of valves for the supply of water to and from cisterns and other receptacles; a new float-valve.	1050	30th April 1853	Charles Adams.
Improvements in steam-engines	1070	2nd May 1853	Honoré Mane.
Modes of preventing accidents arising from an insufficient supply of water in steam-boilers.	1085	4th May 1853	Edward Walmsley.
Valves and stop-cocks	1091	4th May 1853	Edmund Jury Ockenden the elder. Edmund Jury Ockenden the younger.
Valves of pressure-lamps; lamp-burners	1118	6th May 1853	John Thomas Stroud.
A new or improved stop-cock for regulating the flow of gases.	1173	12th May 1853	James Parkes.
Improvements in steam engines, which improvements are also applicable to the machinery or apparatus connected to steam-boilers. (*Disc valves.*)	1194	14th May 1853	Thomas Stephen Holt.
Certain improvements in steam-engines	1202	14th May 1853	Peter Armand le Comte de Fontainemoreau.
Apparatus for purifying liquids in a ready and economical manner. (*Constructing a compound tap.*)	1227	18th May 1853	John Ryan.
Making a gas, steam, air, or liquid safety-tap	1237	19th May 1853	Samuel Wright.
Apparatus for bottling or supplying vessels with fluids. (*Using a funnel valve.*)	1269	23rd May 1853	John Harcourt Browne.
Regulating the pressure of steam	1295	26th May 1853	Alphonse Rene le Mire de Normandy.
Steam-engines; production of steam for the same	1491	18th June 1853	John Moore Hyde.
Machinery and apparatus for grinding and turning metals (*For making ball valves.*)	1502	20th June 1853	Hiram Barker. Francis Holt.
Apparatus for measuring liquids, gases, and other elastic fluids, and for regulating the flow thereof &c.	1525	22nd June 1853	Charles Topham.
Constructing and working valves for baths, washstands, and other purposes.	1552	25th June 1853	Alfred Harlow.
Apparatus used in the manufacture of gas	1621	7th July 1853	Alexander Angus Croll.
Gas-regulators	1716	20th July 1853	Moses Poole.
Water-closets and urinals	1738	23rd July 1853	Frederic Warner.
Apparatus for the purpose of preventing fraud in drawing off liquids.	1753	26th July 1853	John Dawson.
Rotatory engines	1767	27th July 1853	Ange Louis du Temple de Beaujeu.
Tap for drawing off liquids	1802	2nd Aug. 1853	William Perkes, junior.
Regulating the flow and pressure of gas and other fluids.	1849	8th Aug. 1853	Moses Poole.
Improved cock or tap	1858	10th Aug. 1853	James Burden

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES &c.—*continued.*			
Improvements in furnaces - - - (*Valves.*)	1863	10th Aug. 1853	Samuel Hall.
Apparatus for regulating the supply of water to steam and other boilers, applicable also to regulating the supply of liquids to vessels and reservoirs in general. (*Stop-cock.*)	1878	12th Aug. 1853	Samuel Adams.
Air-pump buckets; valves for steam-engines and other purposes - - - - -	1898	13th Aug. 1853	George Peel. Robert Brownhill.
Construction of cocks and such like articles -	1922	17th Aug. 1853	Samuel Perkes.
Improvements in steam-engines - - -	1927	17th Aug. 1853	George Leedham Fuller.
Steam-engines; apparatus connected therewith -	2022	31st Aug. 1853	William Beckett Johnson.
Steam-boilers; apparatus applicable thereto and to be used therewith - - - - -	2029	2nd Sept. 1853	John Tayler. James Griffiths. Thomas Lees.
Engine to be worked by steam, air, or water -	2052	6th Sept. 1853	James Davis. Robert Ramsay.
Pressure-governor or self-acting apparatus for regulating the flow of water.	2064	8th Sept. 1853	James Gascoigne Lynde, junior.
An improved manufacture of gas-regulator &c. -	2066	9th Sept. 1853	Alfred Vincent Newton.
Improvements in steam-engines - - -	2093	10th Sept. 1853	Edwin Scragg.
Valves and pistons - - - -	2104	12th Sept. 1853	John Wright Child. Robert Wilson.
Improvements in and applicable to valves for reciprocating engines driven by steam or other elastic fluid - - - - - - -	2125	14th Sept. 1853	John Wakefield. James Baskerville.
Safety-valves for boilers - - - -	2128	14th Sept. 1853	John Timmis.
Certain improvements in steam-engines - -	2130	14th Sept. 1853	John Jonathan. George Collins.
Governors for steam-engines - - -	2149	15th Sept. 1853	Sydney Smith.
Hydraulic engines - - - -	2228	28th Sept. 1853	Michel Ovide Bernard Lesage.
Certain improvements in steam-engines - -	2232	29th Sept. 1853	James Griffiths.
Instruments or apparatus for measuring and indicating the distance travelled by carriages; means of transmitting motion thereto from the running wheels.	2270	4th Oct. 1853	James Lee Norton.
Improvements in steam-engines - - -	2281	6th Oct. 1853	John Milner.
Improved supplemental reflux valve for steam-engines.	2352	13th Oct. 1853	Henry Whitaker Butterworth.
Steam and water valves - - - -	2488	27th Oct. 1853	Robert Bishop.
Obtaining steam-power; regulating the same -	2541	2nd Nov. 1853	Frederick Lipscombe.
Improvements in and applicable to steam-engines -	2571	5th Nov. 1853	Samuel Harrison.
Construction of organs and free reed instruments - (*Applying a throttle valve.*)	2634	14th Nov. 1853	Henry Willis.
Improvements in steam-engines - - -	2728	23rd Nov. 1853	William Beckett Johnson.
Certain improvements in straining mill-saws - (*Pressure-valve.*)	2761	26th Nov. 1853	Auguste Edouard Loradoux Bellford.
Escape-valves and safety-valves - - - (*For steam-engines.*)	2796	1st Dec. 1853	Joseph Dilworth.
Apparatus for applying sand to the rails of railways.	2853	8th Dec. 1853	James Beall.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES, &c.—*continued.*			
Atmospheric counterbalance slide-valve for the steam-engine, hydraulic and all other machines in which the slide-valve is used or required -	2861	9th Dec. 1853	Duncan Christie. John Cullen.
Apparatus used when manufacturing gas, which apparatus or part of which is also applicable when transmitting gas from one place to another. (*Leather or gutta-percha valve.*)	2939	17th Dec. 1853	George Anderson.
Presses for expressing oil or other fluids from fruits, grains, or other substances. (*Safety-valve.*)	2951	19th Dec. 1853	Auguste Edouard Loradoux Bellford.
An improved cooking-apparatus - - - (*Valves for regulating temperature.*)	2954	20th Dec. 1853	Adam Paterson.
Manufacture of liquid hydro-carbons and paraffine - (*Furnace valve or regulator.*)	2958	20th Dec. 1853	Paul Wagenmann.
Apparatus for drawing condensed steam and air from pipes or other chambers in which steam is used.	2984	23rd Dec. 1853	John O'Neil.
Apparatus for regulating the supply of air to furnaces, and for preventing radiation of heat from fire-doors and other parts of the fronts of furnaces. (*Valves for fire-doors.*)	3000	27th Dec. 1853	Thomas Symes Prideaux.
Governors for regulating the pressure of steam, gas, and other fluids or liquids.	3002	28th Dec. 1853	John Parkinson.
Pistons and stuffing-boxes of engines moved by water, steam, or gas.	3021	29th Dec. 1853	Hippolyte Charles Vion.
Improvements in ascending and descending mines and shafts, and in apparatus connected therewith, by which improvements the ventilation of mines is increased. (*Valves for the "cages."*)	3027	30th Dec. 1853	Joseph Marlor.
Cocks, taps, and valves - - - -	3038	31st Dec. 1853	James Slater.
VASES.			
Preparing plastic materials to be used in the manufacture of fired wares and other purposes. (*Moulding vases.*)	197	26th Jan. 1853	Nicolas Francisque Ador.
Depositing metals or alloys of metals - -	1777	29th July 1853	William Edward Newton.
Manufacture or treatment of gutta-percha; application thereof. (*Communicated by Louis François Alexandre Deseille.*)	1904	13th Aug. 1853	John Henry Johnson.
Application of sulphate of lime to the fabrication of mosaics and incrustations, and for any new processes of colouration of certain varieties of this substance. (*Facing vases.*)	2030	2nd Sept. 1853	Barthélemy Auric.
Compositions applicable to the manufacture of bricks, tiles, and other moulded articles -	2062	7th Sept. 1853	Benjamin Hustwayte. Richard John Paul Gibson.
Treatment or manufacture of gutta-percha and application thereof. (*Communicated by Jacques Lefevre.*)	2430	21st Oct. 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VENTILATING BUILDINGS, MINES, SHIPS, SEWERS, CARRIAGES, WEARING-APPAREL.			
A thermostat or apparatus for the regulation of ventilation &c. (*In apartments.*)	42	6th Jan. 1853	William Sykes Ward.
Certain improvements in the transmission and the emission of air and sound.	51	7th Jan. 1853	Hezekiah Marshall.
Apparatus for refrigerating - - - - (*For cooling apartments.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
Production and application of heated air - - (*Ventilating apartments.*)	155	21st Jan. 1853	William Taylor.
Machinery for exhausting and driving atmospheric air - - - - - - - (*Ventilating mines.*)	300	3rd Feb. 1853	William Richards. Edwin Beck.
Improvements applicable to steam-pipes used for ventilating &c.	437	21st Feb. 1853	Wright Jones.
Measuring the steerage way of vessels and the rapidity of currents of water and air, applicable to ventilating ships and railway-carriages. (*Communicated by Messrs. Owerdwyn and Droinet.*)	606	9th March 1853	Frederick William Campin.
Certain improvements in ventilating - -	675	18th March 1853	Robert Oates Christian.
Improvements in locomotive-engines - - - (*Ventilating ships' holds.*)	786	2nd April 1853	Sir James Caleb Anderson, Bart.
Warming and ventilating rooms and buildings -	837	7th April 1853	Edward Langdon Bryan.
Ventilating mines, sewers or drains, ships, buildings, generally, and other localities.	951	20th April 1853	Samuel Weight.
Ventilating bricks - - - - - -	1090	4th May 1853	John Houseman Hutchinson.
Construction of buildings - - -	1111	5th May 1853	William Buckwell.
Improvements in weaving - - - - (*Ventilating the weaving room.*)	1209	16th May 1853	Robert Boyd.
Ventilating mines - - - - -	1212	16th May 1853	George Jones.
Heating and ventilating - - - -	1280	25th May 1853	James Lovell.
Fans, blasts, or blowing apparatus - - -	1379	4th June 1853	Joseph Burch.
Ventilating mines - - - -	1381	4th June 1853	Benjamin Biram.
Hats and other coverings for the head - -	1623	7th July 1853	John Knox Stuart.
Ventilating mines - - - -	1663	13th July 1853	Thomas Hill Bakewell.
Improvements in safety-lamps, part or parts of such improvements being applicable to purposes of ventilation generally &c.	1851	9th Aug. 1853	Thomas Young Hall.
Improvements applicable to ventilation and other purposes.	1925	17th Aug. 1853	Thomas Kirkwood.
Apparatus for heating - - - -	2002	29th Aug. 1853	Peter Armand le Comte de Fontainemoreau.
An invention for the better ventilation of field-tents and marquees.	2078	9th Sept. 1853	John Doyle.
Ventilating and preventing spontaneous combustion in ships and other vessels laden with coal, culm, or cinders.	2097	10th Sept. 1853	Robert Tronson.
Opening and closing ventilating louvres - -	2174	19th Sept. 1853	Thomas Restell.
Apparatus for heating water and other fluids -	2333	11th Oct. 1853	James Harris.
Ventilating - - - - - -	2369	14th Oct. 1853	William Palmer.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VENTILATING, &c.—*continued.*			
Apparatus for regulating the hygrometric state of the air in buildings, rooms &c.	2448	24th Oct. 1853	Henry Kraut.
Manufacture of boots and shoes - - -	2466	25th Oct. 1853	Charles Goodyear.
Ventilating drying-stoves - - - -	2676	18th Nov. 1853	Thomas Holmes.
Apparatus for heating water and other fluids - (*Heating air for ventilating buildings.*)	2688	19th Nov. 1853	James Harris.
Ventilating sewers, mines, or other subterranean works.	2814	3rd Dec. 1853	Abraham Rogers.
Preventing drafts of air entering rooms and places when the doors and windows are shut.	2942	17th Dec. 1853	John Greenwood.
Ventilation of granaries, storehouses, or places of deposit for grain whatsoever, and for grinding of grain and dressing of grist, and grinding generally.	2950	19th Dec. 1853	William Crossby.
Improvements in ascending and descending mines and shafts, and in apparatus connected therewith, by which improvements the ventilation of mines is increased.	3027	30th Dec. 1853	Joseph Marlor.
WASHING AND RINSING FABRICS AND MATERIALS.			
Machinery to be used in washing, bleaching, dyeing and sizing yarns and fabrics.	11	3rd Jan. 1853	John Bleackley.
Machinery or apparatus for washing or scouring wool	75	11th Jan. 1853	John Petrie. Samuel Taylor.
Apparatus for washing slivers of wool - -	459	23rd Feb. 1853	Robert Milligan.
Machinery used in washing wool - - -	584	8th March 1853	Samuel Cunliffe Lister.
Washing woollen, linen, cotton, silken, hempden, skin, and flaxen materials and substances—"The rotary washing machine."	680	19th March 1853	John Eldridge.
Method of preparing, treating, and finishing certain textile fabrics called cords, thicksets, velveteens, and beaverteens.	768	30th March 1853	James Worrall, junior.
Machinery for preparing flax, hemp, and other vegetable fibrous substances for scutching or other manufacturing processes.	926	16th April 1853	George Albemarle Cator.
Disengaging silk of its gum - - -	937	18th April 1853	Jean Jules Gonin.
Treatment and scouring or cleansing of textile fabrics	1244	19th May 1853	William Fulton.
A system of permanent circulation of caloric, intended to produce and overheat steam, gas, and liquids. (*For washing &c.*)	1363	3rd June 1853	Ferdinand Louis Gossart.
Apparatus for washing, bleaching, and dyeing fustians, beaverteens, cantoons, satteens, twills, and other textile fabrics.	1493	18th June 1853	James Worrall, junior.
Washing wool and hair; treating and preparing before being spun, wool, flax, cotton, and similar fibrous material.	1539	24th June 1853	Samuel Cunliffe Lister.
Machinery for washing wool and hair - -	1794	1st Aug. 1853	Samuel Cunliffe Lister.
Machinery or apparatus for washing, scouring, cleansing, or steaming woven fabrics, either in the piece or garment, also felts or fibrous substances, and corn, roots, seeds, or similar matters.	1823	4th Aug 1853	Charles Butler Clough.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WASHING, &c.—*continued.*			
Dyeing or colouring textile fabrics and materials; machinery or apparatus connected therewith. (*Applicable for washing and rinsing.*) (*Communicated by Emile Weber.*)	1903	13th Aug. 1853	John Henry Johnson.
Machinery or apparatus for washing, bleaching, dunging, and dyeing woven fabrics.	2038	3rd Sept. 1853	Albert Nagles.
Machinery or apparatus for washing, scouring, or cleansing woven fabrics, either with plain or pile surfaces.	2142	15th Sept. 1853	Thomas Browning.
Apparatus used in washing wool and other fibrous material.	2252	1st Oct. 1853	William Brown.
Machine for washing linen and other textile articles	2759	26th Nov. 1853	Hippolyte Coutte. Jean Michel Hammerbacher.
Apparatus for washing and scouring wool - -	2838	6th Dec. 1853	John Hargrave.
Washing or scouring wool and fabrics composed entirely or partly of that material.	2857	8th Dec. 1853	Benjamin Murgatroyd.
Treatment or preparation of wool and of the wash-waters employed in such treatment. (*Communicated by Messrs. Villermet and Mannheimer.*)	2928	16th Dec. 1853	John Henry Johnson.
Washing or scouring wool, alpaca, and mohair, and fabrics composed entirely or partly of those materials.	2978	22nd Dec. 1853	Benjamin Murgatroyd.
Apparatus for washing and bleaching - -	2988	24th Dec. 1853	Joseph Gaultier.
WASH-STANDS.			
Treatment of bituminous and asphaltic matters; rendering them applicable to various useful purposes. (*Wash-stands.*)	335	8th Feb. 1853	Auguste Edouard Loradoux Bellford.
Certain improvements in wash-stands, part of which improvements are also applicable to table fountains.	1011	27th April 1853	James Dinning.
Manufacture of articles of marble - - -	1188	13th May 1853	John Knowles. Edward Taylor Bellhouse.
A new and useful article of furniture to serve the purposes of a wash-stand &c. - - -	2310	8th Oct. 1853	Henry Richardson Plimpton. James Leonard Plimpton.
WATER-CLOSETS AND URINALS; FLUSHING WATER-CLOSETS.			
Certain improvements in soil-pans - - -	54	8th Jan. 1853	Thomas Smith.
Water-closets - - - - -	286	2nd Feb. 1853	Owen Williams.
Water-closets - - - - -	299	3rd Feb. 1853	Alfred Tylor. Henry George Frasi.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATER-CLOSETS &c.—*continued.*			
Certain improvements in valves applicable to the receiving and discharging of water or other fluids - - - - - - (*Flushing water-closets.*)	445	21st Feb. 1853	Thomas Bell. Richard Chrimes.
Water-closets and urinals - - -	706	23rd March 1853	John Henry Park. Joseph Park.
Machinery to be actuated by water or air - -	855	9th April 1853	George Frederick Goble.
Improvements in flushing apparatus and in water-closets.	904	14th April 1853	Joseph Adamson.
Regulating the supply of water for water-closets -	1675	14th July 1853	George Humphrey.
Water-closets and urinals - - -	1738	23rd July 1853	Frederic Warner.
Ships' water-closets - - - -	2299	7th Oct. 1853	Thomas Lambert.
A self-acting flushing apparatus applicable to sanitary purposes.	2513	31st Oct. 1853	John Gray.
Water-closets; apparatus connected therewith -	2565	4th Nov. 1853	John Hartley Higginbottom.
A portable water-closet with water supply without the action of pump.	2674	18th Nov. 1853	Alfred Guy.
Mode of giving publicity - - - - (*And constructing urinals.*)	2681	18th Nov. 1853	Jean Baptiste Clavières.
WATERING LAND; SUPPLYING TOWNS WITH WATER.			
Arrangements for supplying waters to towns or other places,	1290	26th May 1853	Edward White.
An improved hydraulic machine - - - (*Supplying buildings.*)	2928	16th Dec. 1853	Alphonse Médail.
Carts for distributing water or liquid manure -	2943	17th Dec. 1853	Isaac James.
WATERPROOFING; WATERPROOF FABRICS.			
A new application of a system to render boots and shoes waterproof without sewing or nailing whatever, applicable also to render waterproof, hats, caps, and general hatting; also the application of machines to the manufacturing of general shoemaking and hatting.	296	3rd Feb. 1853	Benoit Dulaurier.
The application of certain materials to the manufacture of coffin furniture. (*And waterproofing the same.*)	531	3rd March 1853	Charles Humpage.
Plastic compound applicable to various ornamental and useful purposes.	1260	21st May 1853	Henri Joseph Scoutetten.
Manufacture of waterproof or partly waterproof fabrics.	1483	18th June 1853	Henry Bessemer.
Manufacture of waterproof fabrics - - -	1522	22nd June 1853	Frederick Ayckbourn.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATERPROOFING, &c.—*continued.*			
Spreading or applying india-rubber or compositions of india-rubber on fabrics.	1688	15th July 1853	Charles Goodyear.
Manufacture of a composition resembling papier-mâché and carton-pierre, applicable to the same purposes to which papier-mâché and carton-pierre are applied;—partly applicable to the construction of ships and boats, and roofing.	1804	2nd Aug. 1853	William Henry Clarke.
Means of depriving caoutchouc of all unpleasant odour and of imparting to it various agreeable perfumes.	1982	26th Aug. 1853	Eugène de Varroc.
Manufacture of waterproof fabrics - - -	2006	30th Aug. 1853	Charles Goodyear.
Waterproofing of boots and shoes - - -	2041	5th Sept. 1853	John Doyle.
A certain manner of preparing marquetry and all other kinds of inlaid work in veneers of various thicknesses; fixing the same to walls and ceilings of whatever kind, and in or upon floors of wood, stone, or metal; rendering such floors water and fire proof.	2198	23rd Sept. 1853	Charles Alexander.
Manufacture of nose-bags - - -	2339	12th Oct. 1853	John Morison. Daniel Hurn.
Making india-rubber solution for waterproofing cloths or other articles without the offensive smell produced by the use of naphtha, turpentine, oils &c. - - - - - - - -	2406	19th Oct. 1853	Gustavus Gidley. John Bell Muschamp.
Mode of treating waterproof fabrics - - (*Deodorizing.*)	2493	27th Oct. 1853	Joseph Gurney.
Manufacture of waterproof fabrics - - -	2890	13th Dec. 1853	James Wansbrough.
Compositions to be employed as substitutes for caoutchouc, gutta-percha, and certain fatty bodies.	3045	31st Dec. 1853	Stanislas Tranquile Modeste Sorel.
WATER-WHEELS, HYDRAULIC MOTIVE-POWER ENGINES.			
Apparatus or mechanism for driving machinery through the agency of water.	18	4th Jan. 1853	Charles John Burnett.
Machine for obtaining motive-power - -	118	17th Jan. 1853	Auguste Edouard Loradoux Bellford.
Apparatus for measuring gas, water, and other fluids;—also applicable for obtaining motive-power.	773	31st March 1853	George Hanson.
Production of motive-power—"The counteracting reaction motive-power engine."	809	4th April 1853	William Willcocks Sleigh.
Machinery to be actuated by water or air - -	855	9th April 1853	George Frederick Goble.
Engines to be worked by air, or air and water combined.	1336	31st May 1853	George Goodlet.
Obtaining motive-power - - - - -	1408	9th June 1853	Antoine Ponçon.
Machinery for propelling vessels and other machinery—"A crank propeller" - - - (*Applicable as a water-wheel.*)	1439	14th June 1853	Joseph H. Penny. Thomas B. Rogers.
Revolving engine to be worked by water &c. -	1445	15th June 1853	Arthur Parsey.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATER-WHEELS, &c.— *continued.*			
Apparatus which may be applied to the obtaining of motive-power.	1525	22nd June 1853	Charles Topham.
Engine to be worked by water &c. - - -	2052	6th Sept. 1853	James Davis. Robert Ramsay.
Hydraulic engines - - - - - - (*Water-wheels.*)	2220	28th Sept. 1853	Louis Dominique Girard.
Obtaining and applying motive-power - -	2887	12th Dec. 1853	William Evans.
See also "VALVES, &c." For Governors—*see* "STEAM AND OTHER GOVERNORS, &c."			
WEAVING; BRAIDING; PLATTING; PREPARING FOR WEAVING.			
I.—Sizing, Preparing, Warping, and Beaming Yarns.			
Machinery to be used in sizing &c. yarns and fabrics	11	3rd Jan. 1853	John Bleackley, junior.
Dressing yarns for looms - - - - -	176	24th Jan. 1853	William Nairne.
Treatment, cleansing, or finishing of textile fabrics - (*Steaming or damping yarns.*)	355	10th Feb. 1853	William Fulton,
Dressing, sizing, and tape machines - - -	641	14th March 1853	William Bashall.
Manufacture of piled figured fabrics, by alterations in and additions to looms for weaving, including also a warping-machine.	716	24th March 1853	Charles Victor Frederic de Roulet.
Machinery or apparatus for picking warps - - (*And warping; also creel pegs.*)	978	23rd April 1853	Thomas Knowles.
Machinery for warping and beaming yarns or threads.	1348	2nd June 1853	William Knowles.
Preparing for weaving wet-spun yarns of flax and tow - - - - - - - (*Drying on bobbins.*)	1662	13th July 1853	Abraham Walker Craig. Daniel Foster. Thomas Valentine.
Looms for weaving; apparatus connected therewith	1852	9th Aug. 1853	William Rowan.
Machinery, apparatus, or implements for weaving - (*Applying moisture to yarns.*)	1948	20th Aug. 1853	William Vaughan. John Scattergood.
Machinery for dressing and warping yarns - -	2186	21st Sept. 1853	George Peabody.
Machinery or apparatus for warping and sizing or otherwise preparing yarns or warps to be woven -	2293	7th Oct. 1853	James Bullough. John Walmsley. David Whittaker.
Weaving by hand - - - - - - (*Warping-frame.*)	2491	27th Oct. 1853	Jean Martin Adolphe Bayet Lemonier.
Weaving and manufacturing raised pile fabrics; machinery employed therein. (*Subjecting silk yarn to acids.*)	2707	22nd Nov. 1853	Edward Briggs.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
II.—Weaving Plain and Figured Work (*as Single, Double, and Tubular Fabrics, Twills, Shawls, Quilts, Stay-cloth, &c.*).			
Improvements in circular frames and in the fabrics and articles produced thereon.	45	7th Jan. 1853	Thomas Pape.
Looms for weaving	70	11th Jan. 1853	William Weild.
Power-looms	113	17th Jan. 1853	William Nairne.
Manufacture of woven or textile fabrics	139	20th Jan. 1853	John Whiteley Ward.
Looms for weaving	253	31st Jan. 1853	John Mason.
Improvements in looms	256	31st Jan. 1853	David Chalmers.
Manufacture of textile fabrics (*Mixed cloths.*)	354	10th Feb. 1853	John Hunter.
Certain improvements in and applicable to looms for weaving	389	15th Feb. 1853	Valentine Cocker. Reuben Herbert.
Looms for weaving	438	21st Feb. 1853	Samuel Rodgers Samuels. Robert Sands.
Weaving-machinery employed in the manufacture of textile fabrics; manufacture of such fabrics	441	21st Feb. 1853	James Mash. Joseph Sharp Bailey.
Manufacture or production of ornamental or figured fabrics.	453	22nd Feb. 1853	John Richard Cochrane.
Machinery or apparatus used in weaving	611	10th March 1853	George Collier.
Improved kind of loom (*Circular looms for tubular fabrics.*)	645	15th March 1853	François Durand.
Looms for weaving	660	17th March 1853	George Johnson.
Power-looms	670	18th March 1853	Auguste Edouard Loradoux Bellford.
Looms for weaving (*Tubular work.*)	688	21st March 1853	William Whitaker Collins.
Looms for weaving (*Two or more pieces one over the other.*)	750	29th March 1853	Laurence Frederick Keogh
Manufacture of woven, textile, and looped fabrics; machinery employed therein.	753	29th March 1853	William Hodgson.
Looms for weaving	765	30th March 1853	John Carter Ramsden.
Improvements in weaving	767	30th March 1853	James Houston.
Looms for weaving	774	31st March 1853	John Radcliffe.
Improvements in weaving	779	1st April 1853	William Crofts.
Improvements applicable to looms for the manufacture of textile fabrics (*Twilled fabrics.*)	798	4th April 1853	Robert William Sievier. James Crosby.
Weaving; machinery employed therein (*Circular loom for weaving in bag form.*)	818	5th April 1853	William Johnson.
Power-looms	838	7th April 1853	Colin Mather.
Machinery for weaving seamless goods (*Bags.*)	854	8th April 1853	Stephen Taylor.
Production of lace and other fabrics (*As furniture-covers, curtains, horse-cloths &c.*)	1002	26th April 1853	Auguste le Roy. Jean le Roy. Eugène Pavy.
Looms for weaving	1044	29th April 1853	James Macpherson.
Looms for weaving	1104	5th May 1853	Joel Livsey.
Warp machinery for producing ornamented and textile fabrics.	1107	5th May 1853	John Whiteley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Machinery for weaving	1129	7th May 1853	Hesketh Hughes. WilliamThomas Denham.
Manufacture of covered corded textile fabrics; machinery to be used for the purpose, being applicable either to hand or power.	1160	11th May 1853	Richard Edmondson.
Manufacture of textile fabrics	1163	11th May 1853	John Bottomley.
Looms for weaving	1191	14th May 1853	George Coppock.
Improvements in weaving	1209	16th May 1853	Robert Boyd.
Power-looms for weaving figured fabrics	1218	17th May 1853	Samuel Eccles. James Eccles.
Improvements in looms	1289	26th May 1853	Thomas Singleton.
Improvements in and applicable to looms for weaving.	1311	28th May 1853	Illingworth Butterfield.
Looms for weaving	1346	1st June 1853	James Stocks, junior.
Machinery for weaving	1356	2nd June 1853	Hesketh Hughes. WilliamThomas Denham.
Looms for weaving	1438	14th June 1853	Robert William Sievier. James Crosby.
Manufacture of yarn and fabricating articles therefrom. (*From Lygeum Spartum.*)	1451	15th June 1853	Jules Dehau.
Manufacture of woven fabrics, &c. by the application of a material not hitherto used in Great Britain for such purposes. (*Stipa tenacissima.*)	1452	15th June 1853	Jules Dehau.
Looms for weaving	1474	17th June 1853	Edward Rodgers.
Looms for weaving	1495	18th June 1853	John Cross Richardson.
Manufacture of figured or ornamental fabrics (*Tapestry and chenille.*)	1544	24th June 1853	John Lyle.
Looms for weaving	1554	27th June 1853	William Fairclough.
Looms for weaving	1598	4th July 1853	Henry Meyer.
Looms for weaving	1626	8th July 1853	William Marsden, junior. Samuel Roscow.
Jacquard apparatus	1701	16th July 1853	Benjamin Burrows.
Manufacture of woollen cloths and other fabrics	1761	26th July 1853	John Giblett.
Looms for weaving	1765	27th July 1853	John Knowles.
Manufacture of woven fabrics; apparatus employed therein.	1781	30th July 1853	William Woods Cook.
Looms for weaving; apparatus connected therewith	1852	9th Aug. 1853	William Rowan.
Improvements in weaving (*Communicated by Chevalier Gaetano Bonnelli.*)	1892	12th Aug. 1853	Daniel Illel Picciotto.
Jacquard apparatus	1896	13th Aug. 1853	John Clegg Boond.
Improvements in looms	1943	19th Aug. 1853	George Heyes.
Machinery, apparatus, or implements for weaving	1948	20th Aug. 1853	William Vaughan. John Scattergood.
Machinery for the manufacture of textile and looped fabrics	1967	24th Aug. 1853	Benjamin Hornbuckle Hine. Anthony John Mundella. Thomas Thompson.
Manufacture of stays or corsets (*Communicated by Adolphe Georges Geresme.*)	2044	5th Sept. 1853	John Henry Johnson.
Looms for weaving	2057	7th Sept. 1853	John Gaskin Fletcher. William Peel.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Looms or weaving-machines applicable to the weaving of cotton, silk, flax, hemp, wool, or any other fibrous substances.	2085	9th Sept. 1853	Ernest Alexander Gouin.
Looms for weaving (*Jacquards.*)	2154	16th Sept. 1853	Henry Meyer.
Construction of looms for weaving	2170	19th Sept. 1853	Edward Thomas.
Improvements in weaving	2260	3rd Oct. 1853	William Crofts.
Improvements in weaving	2265	4th Oct. 1853	William Crofts.
Production of figuring in weaving	2276	5th Oct. 1853	William Crofts.
Looms for weaving	2305	8th Oct. 1853	Joseph Denton.
Manufacture of nose-bags	2339	12th Oct. 1853	John Morison. Daniel Hurn.
Weaving single and double fabrics	2374	15th Oct. 1853	Richard Gill.
Improvements in and applicable to looms for weaving.	2375	15th Oct. 1853	Charles Coates.
Power-looms for weaving	2428	20th Oct. 1853	Jonathan Woofenden.
Machinery or apparatus for weaving (*Circular webs.*)	2431	21st Oct. 1853	Christopher Cross. James Crosby.
Machinery for hand and power-loom weaving, applicable to weaving figured, fancy, and checked goods, with any number of picks, by jacquard-engines.	2465	25th Oct. 1853	William Bottomley.
Surveying and raising sunken vessels; apparatus used therein; lifting vessels over bars and other obstructions. (*Weaving mat-cases of spun yarn.*)	2469	26th Oct. 1853	Edward Austin.
Looms for weaving (*Power-looms.*)	2471	26th Oct. 1853	Richard Heyworth. Thomas Battersby.
Weaving by hand	2491	27th Oct. 1853	Jean Martin Adolphe Bayet Lemonnier.
Looms for weaving	2525	1st Nov. 1853	Arthur Elliot.
Power-looms for weaving	2554	3rd Nov 1853	Peter Hindle.
Looms for weaving	2567	4th Nov. 1853	William Foster.
Power-looms for weaving	2576	5th Nov. 1853	James Barlow. Thomas Settle.
Process of preparing flax or similar fibrous material for rendering it fit for spinning and weaving.	2619	11th Nov. 1853	James Hill Dickson.
Looms for weaving	2632	14th Nov. 1853	William Hadfield.
Power-loom weaving	2644	15th Nov. 1853	John Liddell.
Improvements in looms	2767	28th Nov. 1853	John Walmesley. John Ingham.
Apparatus or mechanism of looms for weaving a certain class of plaids, checks, and fancy woven fabrics.	2771	28th Nov. 1853	John Carter Ramsden.
Certain improvements in the construction of the jacquard-machine. (*Communicated by Raymond Ronze.*)	2783	30th Nov. 1853	Peter Armand le Comte de Fontainemoreau.
Power-looms (*Tappet drum.*)	2786	30th Nov. 1853	Joseph Redford.
Check and fancy weaving	2823	5th Dec. 1853	Matthew Andrew Muir.
Manufacture of woven fabrics (*Double cloth.*)	2884	10th Dec. 1853	William Thornley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Construction of looms - - - -	3011	28th Dec. 1853	Samuel Barnes.
Looms for weaving - - - (*Applying a chain with tappets.*)	3023	30th Dec. 1853	William Pickstone. John Booth.
III.—Weaving Petticoats, Under-dresses, Shirt and Habit Fronts.			
Manufacture of cotton fabrics for ladies' under-dresses.	1560	28th June 1853	Alexander Brown.
Manufacture of woven or textile fabrics - - (*Shirt or habit fronts and petticoats.*)	1611	6th July 1853	William Woods Cook.
Manufacture of certain articles for ladies' under-clothing, and fabrics for the same. (*Petticoats and chemises.*)	2773	28th Nov. 1853	James Lord.
Manufacturing, ornamenting, and applying fabrics for articles of clothing; application of certain fabrics to such purposes; producing shapes for articles of clothing. (*Ladies dresses &c.*)	3024	30th Dec. 1853	James Lord.
IV.—Weaving Terry and Piled Fabrics (*as Carpets, Mats, and Velvets*)**; Introducing, Withdrawing, and Cutting out Wires.**			
Apparatus and arrangement of apparatus for making looped fabrics.	6	1st Jan. 1853	Thomas Billyeald.
Manufacture of carpets and other pile fabrics - (*Communicated by Erastus B. Bigelow.*)	41	6th Jan. 1853	Peter Graham.
Manufacture of carpets - - - -	65	10th Jan. 1853	William Webb.
Certain improvements in weaving and in machinery for weaving hat-plush and other cut-piled fabrics.	317	5th Feb. 1853	Thomas Peacock.
Machinery for producing looped fabrics - -	357	10th Feb. 1853	William Ball.
Looms for weaving - - - - (*Velvets.*)	438	21st Feb. 1853	Samuel Rodgers Samuels. Robert Sands.
Manufacture of carpets and other fabrics - -	601	9th March 1853	George Collier.
Improvements in pile and looped fabrics - - (*With portions of open work.*)	657	17th March 1853	John Livesey.
Manufacture of figured or ornamental piled or plushed fabrics. (*Alpaca ground.*)	662	17th March 1853	John Bottomley.
Manufacture of certain descriptions of woven fabrics (*Velvets or piled fabrics.*)	713	24th March 1853	John Beaumont.
Manufacture of piled figured fabrics, by alterations in and additions to looms for weaving, including also a warping-machine, with a method of reading and arranging the colours or materials for the patterns of such figured fabrics.	716	24th March 1853	Charles Victor Fréderic de Roulet.
Machinery for weaving and printing - - (*Fustians and terry fabrics.*)	744	29th March 1853	Luke Smith.
Manufacture of woven textile and looped fabrics; machinery employed therein.	753	29th March 1853	William Hodgson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Manufacture of carpets - - - - (*Cutting alternate rows of loops.*)	935	18th April 1853	William Fawcett. Francis Best Fawcett.
Production of lace and other fabrics - - (*As carpets, &c.*)	1002	26th April 1853	Auguste le Roy. Jean le Roy. Eugène Pavy.
Manufacture of hat-plush - - -	1120	6th May 1853	Peter Armand le Comte de Fontainemoreau.
Machinery or apparatus for manufacturing looped terry or other similar fabrics.	1175	12th May 1853	Joseph Denton.
Power-looms for weaving figured fabrics - - (*Applicable to carpet-looms.*)	1218	17th May 1853	Samuel Eccles. James Eccles.
Manufacture of mats - - - -	1234	18th May 1853	Benjamin Newton.
Manufacture of pile fabrics; machinery or apparatus employed therein.	1236	18th May 1853	Edward Briggs.
Improvements in weaving - - -	1391	6th June 1853	Christopher Nickels. James Hobson.
Looms for weaving - - - -	1520	22nd June 1853	John Leach.
Manufacture of figured or ornamental fabrics - (*Carpets.*)	1544	24th June 1853	John Lyle.
Manufacture of piled fabrics; machinery for effecting the same.	1568	29th June 1853	Robert Moore Sievier.
Manufacture of terry cloth or other woven fabrics having looped surfaces; machinery or apparatus connected therewith.	1846	8th Aug. 1853	Richard Christy. John Knowles.
Machinery for the manufacture of terry or cut-pile fabrics, partly applicable to the weaving of other fabrics. (*Introducing and withdrawing wires.*)	1947	20th Aug. 1853	Robert Moore Sievier.
Manufacturing carpets - - - -	2019	31st Aug. 1853	Edward Smith.
Machinery for weaving terry fabrics - - -	2045	5th Sept. 1853	William Edward Newton.
Needles or wires used in the manufacture of carpets, looped pile fabrics, and velvets - - -	2075	9th Sept. 1853	Edwin Lumby. Zacchœus Sugden.
Application of the fibrous part of the palm tree and leaf to arts and manufactures. (*For making carpets and matting.*)	2089	10th Sept. 1853	Arthur Warner.
Manufacture of terry or looped fabrics; machinery for producing the same.	2114	13th Sept. 1853	Thomas Henry Ewbank.
Manufacture of textile fabrics - - - (*Fustians, velveteens, &c.*)	2238	30th Sept. 1853	John Plant.
Manufacture of carpets and other fabrics -	2412	19th Oct. 1853	George Collier.
Manufacture of carpets and other fabrics - -	2414	19th Oct. 1853	Charles Barraclough.
Machinery for weaving carpets, velvet, &c. - -	2417	19th Oct. 1853	Thomas Thompson.
Manufacture of carpets - - - -	2470	26th Oct. 1853	George Gower Woodward.
Weaving by hand - - - -	2491	27th Oct. 1853	Jean Martin Adolphe Bayet Lemonnier.
Looms for weaving terry and other similar fabrics -	2497	28th Oct. 1853	John Johnson.
Weaving plush and other piled fabrics - -	2653	16th Nov. 1853	Philip Hill.
Manufacture of carpets - - - -	2694	19th Nov. 1853	John Gerald Potter.
Weaving and manufacturing raised pile fabrics; machinery employed therein.	2707	22nd Nov. 1853	Edward Briggs.
Looms for weaving - - - - - (*Terry and cut-pile.*)	2808	2nd Dec. 1853	George Collier.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Looms for weaving pile fabrics; mode and apparatus for cutting the pile.	2922	16th Dec. 1853	Antoine Limousin.
Manufacture of silk velvets and other such piled goods or fabrics.	3041	31st Dec. 1853	Adolphus Oppenheimer.
V.—Weaving Lace; Making Nets; Framework Knitting (*as Stockings and Braces.*)			
Apparatus and arrangement of apparatus for making looped fabrics.	6	1st Jan. 1853	Thomas Billyeald.
Circular frames; fabrics and articles produced thereon.	45	7th Jan. 1853	Thomas Pape.
Improved nets and other textile fabrics to be used for gloves and other purposes; machinery to be employed in the manufacture thereof - -	72	11th Jan. 1853	James Thornton. John Thornton. Albert Thornton.
Manufacture of nets for fishing and other purposes -	145	20th Jan. 1853	Georges Edouard Gazagnaire.
Machinery for the manufacture of looped fabrics -	456	23rd Feb. 1853	Edwin Stanley Brookes. Joseph Black. George Stevenson. William Jones.
Certain improvements in stockings - - -	824	6th April 1853	James Jerram Pratt.
Production of lace and other fabrics - -	1002	26th April 1853	Auguste le Roy. Jean le Roy. Eugène Pavy.
Warp machinery for producing ornamented and textile fabrics.	1107	5th May 1853	John Whiteley.
Machinery used in the manufacture of framework knitting - - - - - -	1128	7th May 1853	Henry Warner. Joseph Haywood. William Cross.
Manufacture of lace fabrics - - -	1873	11th Aug. 1853	John Dearman Dunnicliff. John Woodhouse Bagley.
Warp machinery employed in the manufacture of purled and other fabrics - - - - -	1962	23rd Aug. 1853	Thomas Herbert. Edward Whitaker.
Warp machinery for the manufacture of textile fabrics.	1963	23rd Aug. 1853	John Whiteley.
Manufacture of braces - - - -	2710	22nd Nov. 1853	William Mee.
Manfacture of nets for fishing and other purposes -	2758	26th Nov. 1853	Georges Edouard Gazagnaire.
VI.—Weaving Smallwares (*Ribbons, Tape, Coach Lace, Fringes, Gimp, Elastic Webbing;*) **Making Braid; Platting Cords.**			
Improved nets and other textile fabrics to be used for gloves and other purposes; machinery to be employed in the manufacture thereof - - (*Making elastic cords.*)	72	11th Jan. 1853	James Thornton. John Thornton. Albert Thornton.
Manufacture of braid; machinery or apparatus connected therewith.	237	29th Jan. 1853	Samuel Rogerson.
Looms for weaving - - - - (*Smallwares, platted goods, or coach lace.*)	438	21st Feb. 1853	Samuel RodgersSamuels. Robert Sands.
Manufacture of cords &c. - - - (*Blind-cords.*)	449	21st Feb. 1853	William Wilkinson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Weaving (*Tapes and ribbons.*)	491	26th Feb. 1853	The Honourable James Sinclair.
Improved kind of loom (*Circular, with modifications applicable for ribbons.*)	645	15th March 1853	François Durand.
Weaving narrow fabrics	763	30th March 1853	Christopher Nickels.
Production of lace and other fabrics (*As gimp, fringe &c.*)	1002	26th April 1853	Auguste le Roy. Jean le Roy. Eugène Pavy.
Weaving narrow fabrics for binding	1183	13th May 1853	William Thomas.
Elastic webbing or fabric	1263	23rd May 1853	Samuel Alfred Carpenter.
Manufacture of hair trimmings (*Weaving.*)	1275	25th May 1853	William Babb.
Smallware looms	1572	29th June 1853	James Tatlow. Henry Hodgkinson.
The adaptation of loom machinery to the purposes of embroidery for badges worn by the police, railway officials, and other officers, which require a succession of figures (*Weaving numbers, letters &c. in coach-lace looms.*)	1713	19th July 1853	Richard Dart. Edward Silverwood.
Machinery or apparatus for manufacturing braid	2034	2nd Sept. 1853	William Ashton. William Brotherton Harvey.
Improvements in weaving (*Narrow fabrics.*)	2265	4th Oct. 1853	William Crofts.
Machinery for weaving coach lace &c.	2417	19th Oct. 1853	Thomas Thompson.
Machinery or apparatus for manufacturing braid	2665	17th Nov. 1853	William Ashton,
Looms for weaving pile fabrics; mode and apparatus for cutting the pile. (*Ribbons.*)	2922	16th Dec. 1853	Antoine Limousin.
VII.—Weaving Wire-cloth; Making Wire-fencing.			
Machinery for making fences and other similar articles of wire.	390	15th Feb. 1853	Benjamin Greening.
New description of cloth or fabric applicable to most purposes to which woven and knitted fabrics are applied (*Wire warp, hemp &c. weft.*)	1996	27th Aug. 1853	Edward Lacey. William Wilkinson.
Machinery or apparatus for manufacturing wire-fencing.	2743	25th Nov. 1853	John Berry.
VIII.—Reading Machines and Cards for Jacquards.			
Method of reading and arranging the colours or materials for the patterns of piled figured fabrics.	716	24th March 1853	Charles Victor Frederic de Roulet.
Manufacture of carpets and other piled fabrics	1424	11th June 1853	Christopher Nickels. James Hobson.
Manufacture of cards or substitutes for cards for the jacquard-loom.	1515	21st June 1853	Charles Cowper.
Weaving by hand	2491	27th Oct. 1853	Jean Martin Adolphe Bayet Lemonnier.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
IX.—Shuttles, Shuttle-skewers, Shuttle-bobbins, Weft-forks; Working Shuttles.			
Improved kind of loom - - - - (*Shuttle-bobbins.*)	645	15th March 1853	François Durand.
Weaving; machinery employed therein - - (*Weft-suppliers.*)	818	5th April 1853	William Johnson.
An improved shuttle-skewer - - -	1614	6th July 1853	James Bradshaw. Thomas Dawson.
Improvements in looms - - - -	1943	19th Aug. 1853	George Heyes.
Shuttles for weaving, the whole or part of which are applicable to skewers used in winding and reeling machines.	2164	17th Sept. 1853	Jonathan Burton.
Shuttles employed in weaving textile fabrics -	2243	1st Oct. 1853	John Summerscales. Benjamin Bancroft.
Looms for weaving - - - - -	2305	8th Oct. 1853	Joseph Denton.
Improvements in and applicable to looms for weaving	2375	15th Oct. 1853	Charles Coates.
An improved shuttle to be used in looms for weaving - - - - - -	2391	17th Oct. 1853	William Scowcroft Low. John Barnes.
Machinery or apparatus for weaving - - (*Cylindrical shuttles.*)	2431	21st Oct. 1853	Christopher Cross. James Crosby.
Looms for weaving - - - - (*Working shuttles.*)	2525	1st Nov. 1853	Arthur Elliot.
Weft-forks for power-looms - - -	2636	14th Nov. 1853	Matthew Gray.
X.—Temples, Pickers, Healds, and Reeds.			
Looms for weaving - - - - (*Temple.*)	70	11th Jan. 1853	William Weild.
Improvements in looms - - - - (*Temples; reeds.*)	256	31st Jan. 1853	David Chalmers.
Construction of the combs of looms for weaving - (*For weaving folds.*)	596	9th March 1853	François Valtat. François Marie Rouillé.
Machinery or apparatus used in weaving - - (*Self-acting temple.*)	611	10th March 1853	George Collier.
Looms for weaving - - - - (*Substitute for healds.*)	660	17th March 1853	George Johnson.
Power-looms - - - - - (*Mounting harness; securing pickers.*)	670	18th March 1853	Auguste Edouard Loradoux Bellford.
Looms for weaving - - - - (*Healds with more than one set of eyes.*)	750	29th March 1853	Laurence Frederick Keogh.
Machinery or apparatus for picking warps - - (*And using healds for forming leashes.*)	978	23rd April 1853	Thomas Knowles.
Certain improvements in weavers' harness - - (*Weaving and forming healds.*)	1012	27th April 1853	Richard Howson.
Manufacture of textile fabrics - - - (*Substitute for healds.*)	1163	11th May 1853	John Bottomley.
Improvements in and applicable to looms for weaving. (*Temples.*)	1311	28th May 1853	Illingworth Butterfield.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Reeds for looms	1812	3rd Aug. 1853	John Slack.
Looms for weaving; apparatus connected therewith (*Temples.*)	1852	9th Aug. 1853	William Rowan.
Machinery, apparatus, or implements for weaving (*Temples.*)	1948	20th Aug. 1853	William Vaughan. Thomas Scattergood.
Apparatus to be used in connection with looms for weaving. (*Giving motion to the heulds.*) (*Communicated by Messrs. Ryo and Praxel.*)	2250	1st Oct. 1853	Adolphe Drevelle.
Power looms for weaving (*Elastic medium in the heulds.*)	2428	20th Oct. 1853	Jonathan Woofenden.
Machinery or apparatus for weaving (*Reeds.*)	2431	21st Oct. 1853	Christopher Cross. James Crosby.
Healds or harness for weaving; machinery or apparatus for fabricating the same	2487	27th Oct. 1853	William Vaughan. John Scattergood. Charles Grimshaw.
Looms for weaving (*Temple.*)	2808	2nd Dec. 1853	George Collier.
Improvements in and applicable to looms for weaving. (*Pickers.*)	2878	10th Dec. 1853	Charles Coates.
Power-looms for weaving (*Substitute for temples.*)	3040	31st Dec. 1853	Thomas Brown. Peter MacGregor.
XI.—Loom-breaks; letting off and taking up Motion.			
Looms for weaving (*Taking up and letting off motion.*)	70	11th Jan. 1853	William Weild.
Power-looms	113	17th Jan. 1853	William Nairne.
Improvements in looms (*Letting off motion.*)	256	31st Jan. 1853	David Chalmers.
Certain improvements in weaving and in machinery for weaving hat-plush and other cut-piled fabrics. (*Taking up.*)	317	5th Feb. 1853	Thomas Peacock.
Weaving (*Stopping the loom.*)	491	26th Feb. 1853	The Honourable James Sinclair.
Weaving (*Delivering the warp.*)	572	7th March 1853	Charles Parker.
Machinery or apparatus used in weaving (*Break.*)	611	10th March 1853	George Collier.
Machinery for weaving and printing (*Weft-stoppers.*)	744	29th March 1853	Luke Smith.
Improvements in weaving (*Keeping uniform strain on the harness.*)	767	30th March 1853	James Houston.
Looms for weaving (*Letting off and taking up motion.*)	1044	29th April 1853	James Macpherson.
Improvements in looms (*Stopping motion.*)	1289	26th May 1853	Thomas Singleton.
Looms for weaving (*Taking up.*)	1474	17th June 1853	Edward Rodgers.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Looms for weaving - - - - (*Stopping the loom.*)	1520	22nd June 1853	John Leach.
Looms for weaving - - - - (*Stopping looms.*)	1554	27th June 1853	William Fairclough.
Smallware looms - - - - -	1572	29th June 1853	James Tatlow. Henry Hodgkinson.
Looms for weaving - - - -	1598	4th July 1853	Henry Meyer.
Looms for weaving - - - (*Stop motion.*)	1626	8th July 1853	William Marsden, junior. Samuel Roscow.
Looms for weaving; apparatus connected therewith (*Letting off and taking up motion.*)	1852	9th Aug. 1853	William Rowan.
Improvements in looms - - - - (*Working the stopping motion.*)	1943	19th Aug. 1853	George Heyes.
Looms for weaving - - - - (*Stop motion.*)	2057	7th Sept. 1853	John Gaskin Fletcher. William Peel.
Improvements in looms or weaving-machines applicable to the weaving of cotton, silk, flax, hemp wool, or any other fibrous substances, by means of which improvements the warp threads are unwound more regularly from the warp roller, and the cloth or tissue taken up with more regularity at the same time without straining the warp thread, and by means of a peculiar motion in releasing the tension on the warp thread an elastic or back motion is given to the warp, which permits of all inelastic fibrous substances to be woven upon the power-loom, and in case the weft thread should break the loom can continue in motion without the cloth roller continuing to take up, or without detriment to the tissue.	2085	9th Sept. 1853	Ernest Alexander Gouin.
Improvements in and applicable to looms for weaving.	2375	15th Oct. 1853	Charles Coates.
Manufacture of carpets and other fabrics - - (*Stopping the loom.*)	2414	19th Oct. 1853	Charles Barraclough.
Power-looms for weaving - - - -	2428	20th Oct. 1853	Jonathan Woofenden.
Looms for weaving - - - - (*Taking up motion.*)	2525	1st Nov. 1853	Arthur Elliot.
Power-looms for weaving - - - - (*Taking up motion.*)	2554	3rd Nov. 1853	Peter Hindle.
Looms for weaving - - - - (*Letting off motion.*)	2632	14th Nov. 1853	William Hadfield.
Improvements in power-looms - - - (*Letting-off and taking up.*)	2753	25th Nov. 1853	Enoch Wilkinson. William Rye.
Improvements in looms - - - - (*Stop motion.*)	2767	28th Nov. 1853	John Walmsley. John Ingham.
Looms for weaving - - - - (*Letting off warp.*)	2808	2nd Dec. 1853	George Collier.
Improvements in looms - - - - (*Letting-off and taking-up mechanism.*)	2832	6th Dec. 1853	George Ross. James Inglis.
Improvements in and applicable to looms for weaving. (*Buffers and breaks.*)	2878	10th Dec. 1853	Charles Coates.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued*			
Looms for weaving pile fabrics; mode and apparatus for cutting the pile. (*Unreeling pile warps.*)	2922	16th Dec. 1853	Antoine Limousin.
Construction of looms (*Take-up motion.*)	3011	28th Dec. 1853	Samuel Barnes.
Power-looms for weaving	3040	31st Dec. 1853	Thomas Brown. Peter MacGregor.
WEIGHING-APPARATUS.			
Weighing-machines	24	5th Jan. 1853	Thomas Shilton.
Weighing-machines	341	9th Feb. 1853	Henry Pooley.
Gas-weighing meter	623	12th March 1853	John Fry Heather, M.A.
Machine for weighing or measuring and packing spices, drugs, coffee, and like matters.	669	18th March 1853	Richard Archibald Brooman.
A pneumometer for determining the densities or specific gravities of gases.	831	7th April 1853	John Fry Heather, M.A.
Weighing-machines	1291	26th May 1853	George Simpson.
Apparatus for distinguishing genuine from counterfeit coin.	1979	25th Aug. 1853	George Davis.
New constructions of weighingmachines	2282	6th Oct. 1853	Julius Schönemann.
Counting, measuring, and weighing-needles; preparing papers to receive the same.	2860	9th Dec. 1853	Arthur James.
Instruments and apparatus for indicating or measuring weights and pressures.	2862	9th Dec. 1853	Andrew Shanks.
WHEELS FOR COACHES; RAILWAY-WHEELS.			
Improvements in wheels	46	7th Jan. 1853	William Charles Scott.
Railways; propulsion of engines, carriages, and other vehicles thereon.	48	7th Jan. 1853	George Stewart.
Construction of wrought-iron wheels to be used upon railways or for other purposes; machinery or apparatus connected therewith	111	17th Jan. 1853	Thomas Cropper Ryley. Edward Evans.
Manufacture of hoops and tires for railway-wheels and other purposes.	138	20th Jan. 1853	Peter Rothwell Jackson.
Manufacture of wheels and axles	574	7th March 1853	Thomas Weatherburn Dodds.
Rolling and shaping malleable metals (*For railway-wheels.*)	701	22nd March 1853	William Johnson.
A centriptal flange	708	23rd March 1853	Bernard Boyle.
Manufacture of railway-tires	780	1st April 1853	Jonathan Saunders.
Railway-wheels	871	12th April 1853	Henry Blake.
Welding cast steel with iron, steel, cast iron, and other metals.	880	12th April 1853	François Felix Verdié.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WHEELS FOR COACHES, &c.—*continued.*			
Manufacture of wheels	908	14th April 1853	Charles Green. James Newman.
Construction of wheeled carriages	930	18th April 1853	James Begbie.
Machinery for bending wood or other materials (*Felloes.*)	967	21st April 1853	William Edward Newton.
Manufacture of carriage-wheels	1146	10th May 1853	Octavius Henry Smith. Youngs Parfrey.
Improved metallic wheel	1189	14th May 1853	Richard Eades.
Manufacture of railway and other wheel tires	1296	26th May 1853	Jonathan Saunders.
Manufacture of railway-wheels	1594	4th July 1853	Charles de Bergue.
Improvements in carriages, scaffoldings, and ladders, which scaffoldings are used as carriages.	1599	4th July 1853	Marcus Davis.
An improved construction of wheel for motive-power and propelling purposes.	1704	16th July 1853	Marie Gabriel Adrien Edouard le Coat de Kervéguen.
Manufacture of wheel-tires for locomotive-engines and other carriages.	1800	2nd Aug. 1853	John Bothams.
Producing castings in malleable iron	1887	12th Aug. 1853	Richard Archibald Brooman.
Manufacture of tires of railway wheels	1991	27th Aug. 1853	John Davie MorriesStirling.
Method of forging or manufacturing iron and steel	2116	13th Sept. 1853	Henry Dubbs.
Manufacture of wheels	2168	17th Sept. 1853	Baron Henry de Bode.
Construction of railway engine, carriage, and waggon wheels, &c.	2303	8th Oct. 1853	John Poole. James Colquhoun Kemp.
Manufacture of wheels and tires; construction of furnaces employed in such or similar manufactures.	2306	8th Oct. 1853	Henry Dubbs.
Fixing tire on railway-wheels	2349	12th Oct. 1853	John Gibson.
Construction of carriages; means of preventing the overturning of the same when horses take fright.	2524	1st Nov. 1853	Mark Newton.
Improvements in the manufacture of malleable iron, which improvements are also applicable to the manufacture of other malleable metals. (*For making tire.*) (*Communicated by Clement Desormes.*)	2568	4th Nov. 1853	John Henry Johnson.
Wheels for carriages	2600	9th Nov. 1853	William Dicks.
Railway and other carriages and vehicles	2673	18th Nov. 1853	Perceval Moses Parsons.
Manufacture of railway-wheels	2695	19th Nov. 1853	Emanuel Wharton.
Wheels for vehicles on common roads and railways	2741	25th Nov. 1853	Alexandre André Victor Sarrazin de Montferrier.
Railway wheels, axles, and boxes	2845	8th Dec. 1853	William Bridges Adams.
WHEELS FOR MACHINERY.			
A new composition of different metals or metallic substances. (*For moulding fly-wheels.*)	35	6th Jan. 1853	Edme Augustin Chameroy.
Mechanism to decrease friction in propelling machinery and to compensate for the wear thereof, and to strengthen the driving parts. (*Teeth of cog and spur wheels.*)	1574	30th June 1853	Elias Robison Handcock.

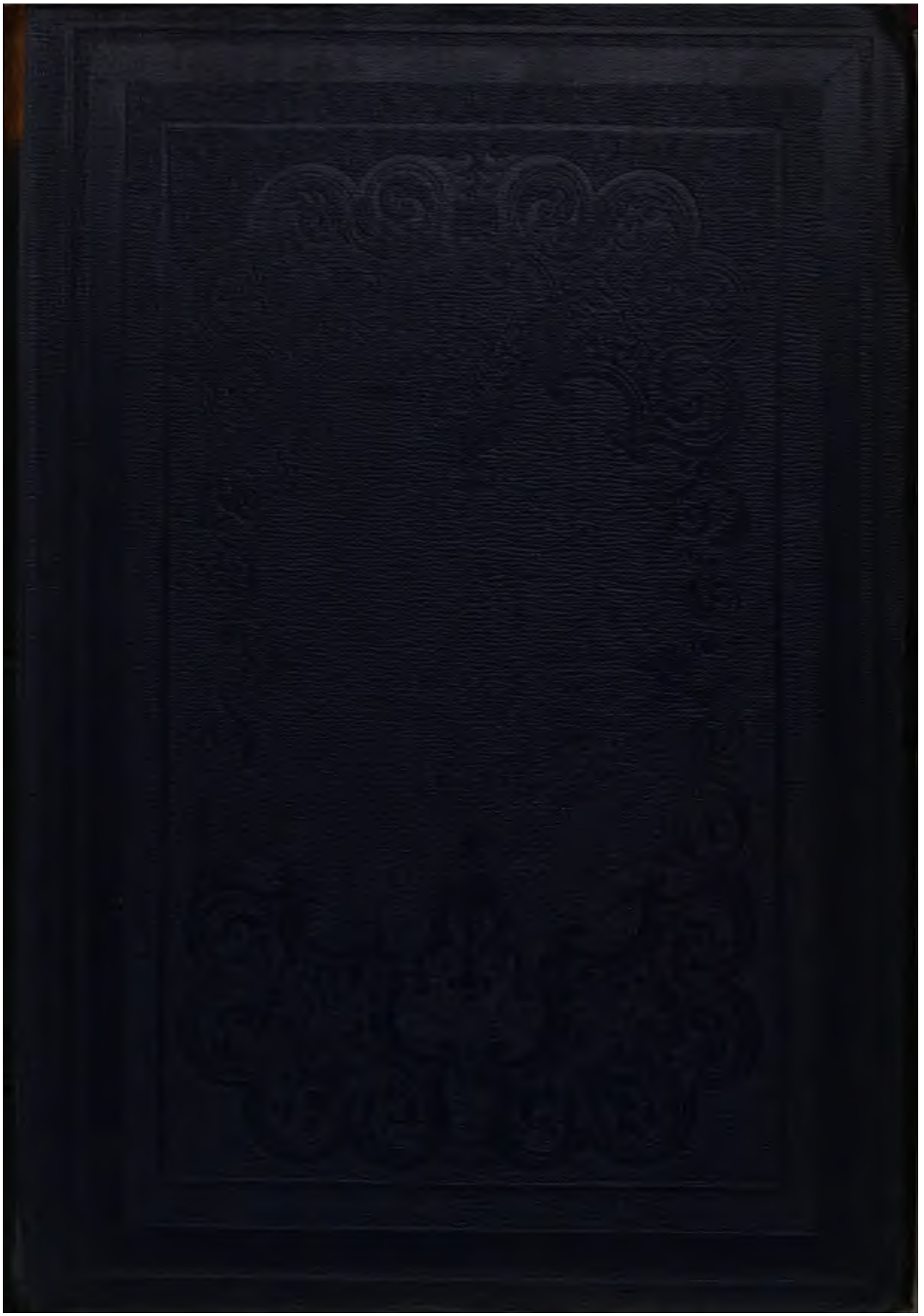
Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WHEELS FOR MACHINERY—*continued.*			
Machinery for manufacturing hoops and wheels -	2261	4th Oct. 1853	Peter Rothwell Jackson.
Machinery or apparatus for cutting, boring, and shaping metals and other substances. (*Boring wheels.*)	2508	31st Oct. 1853	Joseph Haley.
Cutting tools; working of iron, brass, and other metals, and wood and other materials - -	2526	1st Nov. 1853	John Whitehead. Thomas Whitehead.
Improvements in moulding, more particularly applicable to toothed wheels. (*Communicated by Monsieur de Louvrie.*)	2880	10th Dec. 1853	John Henry Johnson.
Apparatus for drilling or boring metals and other substances. (*Constructing bevel wheels.*)	2998	24th Dec. 1853	Joseph Lewis.
For Paddle-wheels—*see* "PROPELLING (Ships, &c.)" *See also* "WATER-WHEELS, &c."			
WINDING AND REELING YARN.			
Machinery applicable to winding of cotton-wool, flax, silk, and other fibrous materials.	80	12th Jan. 1853	James Fletcher.
Reeling yarns or threads - - -	85	12th Jan. 1853	William Nairne.
Improvements applicable to machinery or apparatus for reeling or winding silk, cotton, or other fibrous substances, for measuring or gauging the same.	116	17th Jan. 1853	Adolphe Iglesia.
Machinery for winding or doubling yarns - -	137	20th Jan. 1853	John Crabtree.
Certain improvements in and applicable to machines for winding yarn or thread, called "winding-machines," used in the manufacture of cotton and other fibrous substances.	519	2nd March 1853	James Abbott.
Treatment or manufacture of textile materials - (*Removing knots in reeling and winding.*)	640	14th March 1853	William Stevenson.
Winding silk from the cocoon - - -	802	4th April 1853	Moses Poole.
Machine for reeling, &c. fibrous substances -	849	8th April 1853	Jean Joseph Theodore Pratviel.
Production of raw and thrown silk - - (*Winding.*)	901	14th April 1853	John Chadwick. Thomas Dickins.
Apparatus for winding, &c. silk, cotton-wool, flax, hemp, and other filamentous materials.	915	14th April 1853	Jean Baptiste Maniquet.
Reels for reeling or winding yarns - -	1028	28th April 1853	Joseph Hetherington.
Machinery or apparatus for winding yarn -	1494	18th June 1853	John Cross Richardson.
Machinery used for winding, &c. cotton-wool, flax, and other fibrous materials.	1658	12th July 1853	James Fletcher.
Desks, work-boxes, dressing-cases, tea-caddies, and similar articles; arrangements and fittings thereof. (*Coating reels.*)	1859	10th Aug. 1853	John George Taylor.
Certain improvements in and applicable to machines for winding yarn or thread, called "winding-machines," used in the manufacture of cotton and other fibrous substances - -	1916	16th Aug. 1853	John Atherton. James Abbott.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WINDING, &c.—*continued.*			
Machinery used for winding &c. cotton-wool, flax, silk, and other fibrous materials.	1989	27th Aug. 1853	James Hill.
Shuttles for weaving, the whole or part of which are applicable to skewers used in winding and reeling machines.	2164	17th Sept. 1853	Jonathan Burton.
Machinery for preparing linen yarn - - (*Winding.*)	2248	1st Oct. 1853	Samuel Murland.
An elastic spring contained in a cylindric tube or tubular case, the lid of which moves up and down according to the pressure. (*For setting reels.*)	2443	22nd Oct. 1853	Jean François Mermet.
Healds or harness for weaving; machinery or apparatus for fabricating the same - -	2487	27th Oct. 1853	William Vaughan. John Scattergood. Charles Grimshaw.
Machinery for reeling &c. cotton and other fibrous substances.	2633	14th Nov. 1853	Samuel Fletcher Cottam.
Winding yarn into hanks - - - - -	2643	15th Nov. 1853	Charles Emilius Blank.
Machinery for winding, doubling, and spinning silk - - - - - - - (*From cocoons.*)	2723	23rd Nov. 1853	John Hill, senior. John Hill, junior.
Machinery or apparatus for spooling &c. woollen, cotton, and other yarns - - -	2733	24th Nov. 1853	Hugh Mason. John Jones.
Treatment and finishing of threads or yarns -	2744	25th Nov. 1853	William Calder.
Machinery or apparatus for winding yarns or threads on to spools or bobbins.	2901	14th Dec. 1853	John Wibberley.
Preparing rovings and yarns of wool - -	2930	16th Dec. 1853	Samuel Smith.
Winding and twisting wool, cotton, and other fibrous materials - - - - -	2979	22nd Dec. 1853	Thomas Berry. James Mangnall. John Chadwick.
Winding and doubling silk;—applicable to the treatment of other fibrous substances.	3001	27th Dec. 1853	Thomas Molyneaux.
Bobbin-machines - - - - - -	3032	31st Dec. 1853	Chretien Guillaume Schönherr.
WINDOW-BLINDS AND ROLLERS; CURTAIN RODS AND RINGS; CORNICE-POLES; RAISING AND LOWERING BLINDS.			
Blinds, maps, charts, and other articles wound on rollers.	101	14th Jan. 1853	William Steads.
Method of constructing cornice-poles and picture and curtain rods, and other rods from which articles are suspended.	372	12th Feb. 1853	Thomas James Perry.
Rollers, rods, or poles for window-blinds, curtains, maps, and such like purposes - - - -	576	7th March 1853	Thomas Turner Chatwin. Robert M'Leish,
Method of constructing cornice-poles and picture and curtain rods, and other rods from which articles are suspended.	579	8th March 1853	Thomas James Perry.
Application of porcelain and similar materials to ornamenting purposes. (*Curtain rods and rings.*)	637	14th March 1853	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WINDOW-BLINDS, &c.—*continued.*			
Ornamenting surfaces or fabrics applicable to various useful purposes, such as for covers of furniture, imitation tapestry, carpets or hangings. (*And window-blinds.*)	857	9th April 1853	Herbert Taylor.
Rollers or mountings for blinds, maps, and other like articles.	919	15th April 1853	John Lewthwaite.
Manufacture of tubular rods and rings for furniture.	1003	26th April 1853	Uriah Scott.
Raising and lowering blinds and similar appendages.	1279	25th May 1853	Frederick Russell.
Manufacture of blinds, shades, and other vitreous subetances; method or methods of raising, lowering, folding, and regulating such blinds, shades, and other screens.	1392	6th June 1853	Delabere Barker.
Raising and lowering venetian and other blinds;—applicable also to the raising and lowering of other bodies.	1431	13th June 1853	Thomas James Perry.
Raising and lowering various kinds of window-blinds; opening and closing window and other curtains;—applicable also to the raising and lowering or winding and unwinding of maps and other sheets or articles, and to the closing of doors.	1944	20th Aug. 1853	James Kimberley.
Improvements applicable to the manufacture of cornice-poles and other such like articles - -	2054	6th Sept. 1853	Alfred Sommerville. Charles Twigg.
Daylight reflectors; apparatus to be used in connection therewith - - - - - (*Blinds.*)	2458	25th Oct. 1853	John Fordred. Thomas Boyle.
WINDOWS, SASHES, FRAMES, AND FASTENINGS; RAISING WINDOWS; FIXING PANES; MOUNTING GLAZIERS' DIAMONDS.			
Fastenings for windows - - - -	156	21st Jan. 1853	Matthew Andrew.
An invention to prevent all dust, blacks, and spray entering the windows, also a preventative from noise caused by winds, called the "pulveris depulsor," or newly invented window.	227	29th Jan. 1853	Francis Mackrory.
Securing sash-casements, &c. - - -	228	29th Jan. 1853	Thomas Wood Wilson.
Window-sash fastenings - - - -	791	2nd April 1853	Christopher Garman Rosenkilde.
Apparatus for manufacturing moulded candles - (*Mounting glaziers' diamonds.*)	985	23rd April 1853	George Fergusson Wilson. William Henry Hatcher. John Jackson.
Manufacture of porcelain and like wares - - (*Moulding skylights.*)	1004	26th April 1853	Moses Poole.
Raising and lowering windows and similar appendages.	1279	25th May 1853	Frederick Russell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WINDOWS, &c.—*continued.*			
Locks and keys, partly applicable to window-sashes and doors.	1310	27th May 1853	William Henry Bentley.
Combination of glass with iron or other metals, to serve for the construction of windows for buildings, and also of lights for subterranean apartments, and for any purpose for which a translucent medium possessing great strength is desirable.	1840	6th Aug. 1853	Auguste Edouard Loradoux Bellford.
Combining glass and other materials - -	1850	9th Aug. 1853	Thomas Young Hall.
Window frames and sashes - - -	2001	29th Aug. 1853	Edward Patrick Gribbon.
Window sashes and shutters - - -	2031	2nd Sept. 1853	James Pigott Pritchett.
Means of protecting iron of every kind against the action of the weather and of various corroding substances, so that iron thus protected will answer for window-frames &c.	2340	12th Oct. 1853	Nicholas Callan.
Improvements in ventilating - - - (*Constructing sash-frames.*)	2369	14th Oct. 1853	William Palmer.
Improvements in windows - - - -	2434	21st Oct. 1853	Charles Nicolas Michel Augustin Lecomte.
Construction and manufacture of windows - - (*Glass, enamel, or china frames; fixing panes.*)	2455	25th Oct. 1853	Thomas Summerfield.
An improved construction of glaziers' diamond -	2704	21st Nov. 1853	Augustus Radcliffe.
Manufacture of wrought-iron frames - -	2959	20th Dec. 1853	James Boydell.
WINE, CIDER, PERRY; WINE-HAMPER.			
Apparatus for refrigerating - - - (*Applicable for purifying wines, cider &c.*)	106	15th Jan. 1853	Hippolyte Charles Vion.
An invention which may be used for grinding or crushing apples for cider.	248	31st Jan. 1853	Richard Palmer.
Treating fermentable liquors; machinery or apparatus used therein. (*Preserving balsamic principles in vinous fermentation.*)	384	14th Feb. 1853	Jean Antoine Gervais.
Case or hamper for carrying wine, spirits, and other liquids, in bottle.	2502	29th Oct. 1853	Peter Owen Bernard.
WIRE; WIRE-CLOTH.			
Manufacture of tubes; application of tubes to certain purposes - - - - - (*As wire.*)	110	17th Jan. 1853	Thomas Potts. James Septimus Cockings.
Machinery or apparatus for testing or ascertaining the strength of wire, &c.	251	31st Jan. 1853	Louis Guillaume Perreaux.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WIRE, &c.—*continued.*			
Pointing wire	348	9th Feb. 1853	Charles Iles.
Manufacture of pianoforte wire, applicable also to articles of iron and steel generally.	423	18th Feb. 1853	James Horsfall.
Manufacture of wire	448	21st Feb. 1853	John Davie Morries Stirling.
Machinery or apparatus for drawing wire	986	23rd April 1853	Richard Johnson.
Improvements in shaping metals (*Rolling wire.*)	2622	12th Nov. 1853	Stephen Barker.
Manufacture of wire	2722	23rd Nov. 1853	John Fielding.
Buttons and other dress-fastenings;—partly applicable for other purposes. (*Application of hollow wire.*)	2945	17th Dec. 1853	James Septimus Cockings.
WOOD AND VENEERS (*Bending, Softening, Fixing, and Ornamenting*); **MAKING ARTIFICIAL WOOD AND IMITATION CARVINGS.**			
Apparatus to be employed for veneering surfaces	379	14th Feb. 1853	William Edward Newton.
Machinery for bending wood or other materials	967	21st April 1853	William Edward Newton.
Plastic compound applicable to various ornamental and useful purposes. (*Substitute for carvings in wood.*)	1260	21st May 1853	Henri Joseph Scoutetten.
Method of producing designs and patterns in wood (*Forming ornamental veneers.*)	1578	30th June 1853	George Sterry.
Method of forming designs and patterns upon surfaces. (*As wood.*)	1714	19th July 1853	Charles Breese.
Compounds which may be employed for mouldings, frames, and many purposes to which wood and other like substances are applicable.	1885	12th Aug. 1853	Richard Archibald Brooman.
Manufacture of crates made of wood for the use of potters. (*Softening wood.*)	2194	22nd Sept. 1853	Thomas West Walker.
A certain manner of preparing marquetry and all other kinds of inlaid work in veneers of various thicknesses; fixing the same to walls and ceilings, of whatever kind, and in or upon floors of wood, stone, or metal; rendering such floors water and fire proof.	2198	23rd Sept. 1853	Charles Alexander.
For Sawing, Planing, and Mortising Wood—*see* CUTTING, &c."			

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WRITING, READING, AND PORTFOLIO DESKS AND STANDS.			
Construction of easy-chairs - - - (*With reading-desks.*)	909	14th April 1853	Robert Wyburn.
Application and combination of glass, porcelain, stoneware, earthenware, terra-cotta, composition in plaster called scagliola and majolica ware. (*Parts of portfolio, print, or reading stands.*)	1480	17th June 1853	James Hogg.
Desks and similar articles; arrangements and fittings thereof.	1859	10th Aug. 1853	John George Taylor.
A new and useful article of furniture to serve the purposes of a writing-desk &c. - - -	2310	8th Oct. 1853	Henry Richardson Plimpton. James Leonard Plimpton.
Friction-joints or fastenings - - - (*For reading-stands.*)	3018	29th Dec. 1853	James White.

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